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Jarosław Żrałka

**Terminal Classic Occupation in the Maya
Sites Located in the Area of Triangulo Park,
Peten, Guatemala**

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For Alicja and Elżbieta

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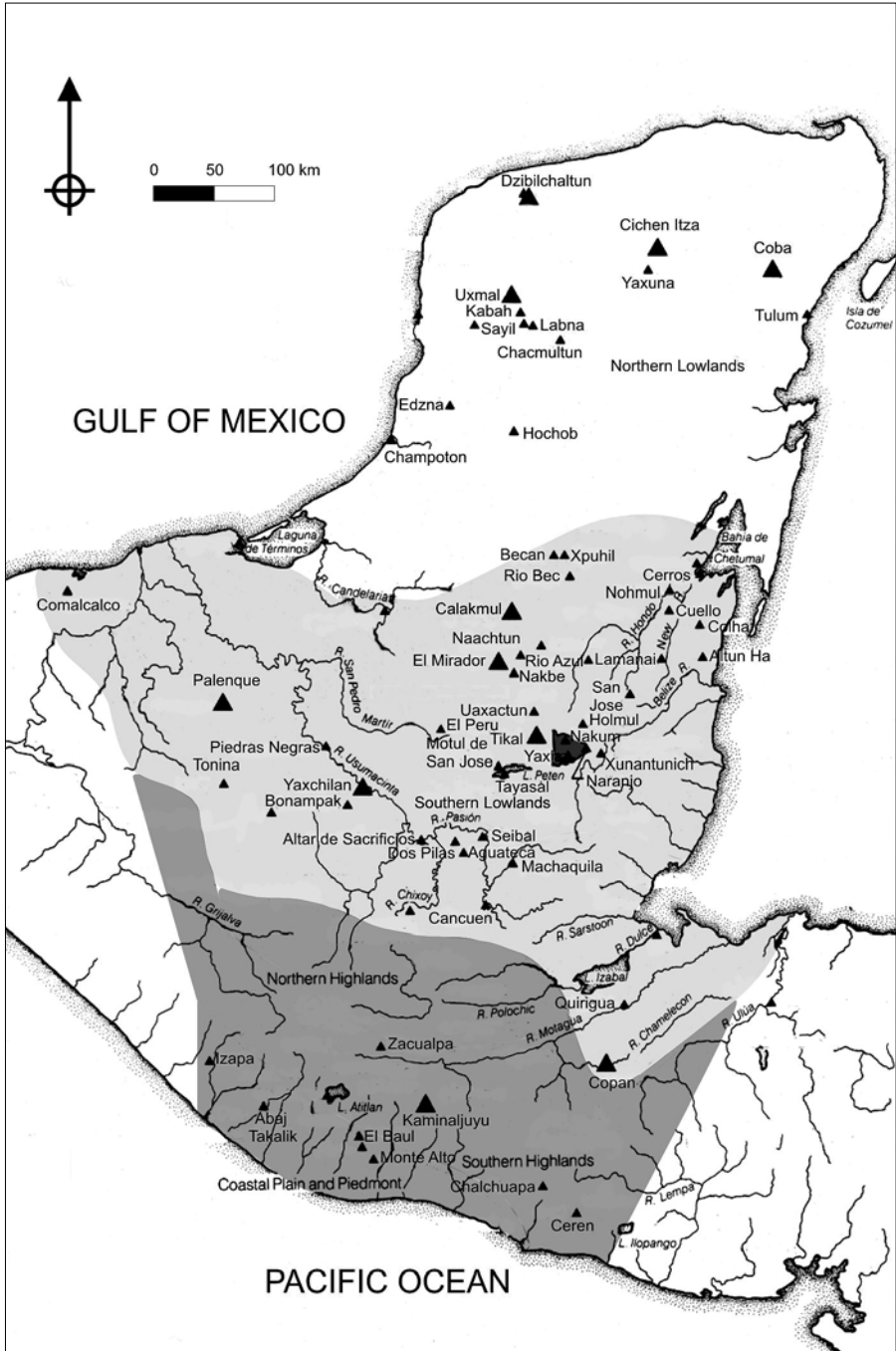
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Chapter I

INTRODUCTION

This book is a shortened and updated version of the doctoral dissertation that was completed and defended by the author in 2005. Its main objective is to examine the cultural situation during the Terminal Classic period in the Triangulo National Park area, situated in the north-eastern part of Guatemala, east of Tikal National Park (Fig. 1). The area has been investigated thoroughly since 1989 by the Yaxha-Nakum-Naranjo Triangulo Project. This research revealed copious evidence of Terminal Classic occupation at several Maya sites, particularly at Nakum and Yaxha. More importantly, archaeological data presented in this book shows that contrary to the fate of most Maya cities in the Southern Lowlands, certain centres in the Triangulo Park region did not experience a sudden and catastrophic decline during the Terminal Classic period but in fact experienced an important cultural, demographic and architectural surge. Archaeological data show that the Terminal Classic period in the Triangulo Park should be perceived as an era of fundamental political, cultural and economic changes. It was a period during which the decline of some centres, including great powers such as Tikal or Naranjo, was accompanied by the appearance and rise of the new political powers, which managed to survive the fall of their neighbours by 100 years or more. In Nakum and to some extent at Yaxha, a concentration of power, population and construction activities occurred during the Terminal Classic. These robust new Terminal Classic “winners”, as we could call them, created new economic and possibly even political alliances with various Lowland Maya sites that were struggling to survive the crisis that ultimately brought about the end of Maya civilisation in this region.

There are four principal chapters. The first one is an introductory chapter and apart from presenting the objectives and scope of this book, it elaborates on the issues pertaining to the definition of the Terminal Classic and the changes that took place during that time in the Maya Lowlands. The second chapter comprises information concerning the territory of the Triangulo Park and its geographical setting. Information about the history of research in the park and the neighbouring areas is included in this chapter as well. The third chapter presents an analysis of Terminal Classic occupation in centres situated in the Triangulo Park. After analysing the largest centres of the park like Nakum, Naranjo and Yaxha, the smaller secondary centres are examined. Sites located in rural or intersite areas are analyzed at the end of the chapter. The third chapter comprises information concerning evidence of cultural activity from the Terminal Classic period, focusing on architecture, offerings, burials and ceramics. Descriptions of each site end with a sum-



1. Map of the Maya area, showing the principal sites and location of the Triangulo Park (by A. Danecki, based on Sharer 1994: fig. 1.1)

mary and a brief conclusion. It should be emphasised that investigations at several sites of the Triangulo Park are still ongoing and this book presents data on Terminal Classic occupation that were documented during archaeological research until 2004 and in some cases, 2005 and 2006.

The last chapter is a summary and conclusion of the research data. It presents the centres of the Triangulo Park in a wider geographical and cultural context and attempts to explain and interpret crucial events as well as the cultural and political situation during the Terminal Classic in this area. The last chapter also includes information concerning probable factors that led to the demise of the Maya centres located in the area of the Triangulo Park.

However, it should be emphasized that determining the causes of the Classic Maya collapse was neither the main objective of my dissertation nor of this book. Instead, the book provides key comparative data about the Terminal Classic period in the Triangulo Park area; it shows the significance of these data in a wider archaeological and geographical context and contributes to our knowledge of this turbulent period in Maya history and the changes that took place at that time.

The term 'Terminal Classic' is applied almost exclusively to the Maya civilisation in Mesoamerica. It was first used by Richard Adams and Aubrey Trik (1961) to describe some post-construction deposits and activities in the epicentre of Tikal. However, the concept of the 'Terminal Classic' period was formalized in 1965 during the Maya Lowland Ceramic Conference in Guatemala City (Willey, Culbert and Adams 1967, see also P. Rice, Demarest and D. Rice 2004). The Terminal Classic period was recognized by the participants of the conference as an archaeological 'horizon' called Tepeu 3, which separated the Classic from the Postclassic period. This horizon was distinguished and defined on the basis of its ceramic content. Ceramic content of the Tepeu 3 horizon was first identified and analysed during research carried out at Uaxactun (Smith 1955). This horizon was originally treated as the final stage of the Late Classic period, based on continuities of ceramics with the earlier archaeological horizon – Tepeu 2. At a conference on Classic Maya Collapse (1970, Santa Fe, New Mexico [Culbert 1973a]) the term 'Terminal Classic' for this time span was suggested and accepted in the Maya chronological terminology. The Terminal Classic was not only defined as a time span with its distinctive ceramic style (which has been the most common basis for defining archaeological horizons to this day), but also as a period when many changes related to the Classic Maya collapse occurred. In his article opening the collection of papers from the conference on the Classic Maya Collapse, Culbert (1973a: 16–17) characterised the Terminal Classic as a "period during which the processes of the downfall worked out their course". He also pointed out that "most of the patterns that gave rise to the idea of Classicism had ceased by this time" (Culbert 1973a: 16–17). Thus, from the very beginning of its application, the term 'Terminal Classic' was associated with the period of disappearance of many cultural elements and practices which defined and characterised the Classic Maya. It was also believed that the demise of the Classic Maya covered "a relatively short period" of approximately 50 to 100 years (Adams 1973a: 22). As more data from new sites and regions of the Maya Lowlands came to light, the meaning of this term acquired yet another aspect and changed significantly. In the 1970s and 1980s, considerable new information concerning the Postclassic settlement in the Southern Maya

Table 1. Ceramic chronologies for the period between the Late Classic and Early Postclassic in different Lowland Maya sites (adapted from P. Rice and Forsyth 2004: Fig. 3.3 with modifications made by the author)

	UAXACTUN	TIKAL	DOS PILAS	SEIBAL	CALAKMUL	MOPAN	XUNAN - TUNICH	CARACOL
1200								
1100		(abandoned)	(abandoned)					(abandoned)
1000		CABAN		(abandoned)	(abandoned)	MOPAN	(abandoned)	TERMINAL CLASSIC b
900	TEPEU 3	EZNAB	SEPENS	BAYAL	HALIBE		TSAK'	TERMINAL CLASSIC
800	TEPEU 2	IMIX	LATE NACIMIENTO	TRANSITION		IXMABUY (Eznab)	HATS' CHAAK	LATE CLASSIC b
700	TEPEU 1	IK	EARLY NACIMIENTO	TEPEJILOTE	KU		SAMAL	LATE CLASSIC a
600	TZAKOL	MANIK	JORDAN	JUNCO		SILTOK (Tepeu)	AK'AB	

	COPAN	COPAN	PIEDRAS NEGRAS	LA JOYANCA	TAYASAL - PAXCAMAN	NAKUM	YAXHA	NARANJO
1200								
1100	(abandoned)	EJAR			CHILCOB	POSTCLASSIC	POSTCLASSIC	
1000						(abandoned)	(abandoned)	
900				TUSPAN		TERMINAL CLASSIC (Tepeu 3)	TERMINAL CLASSIC (Tepeu 3)	TERMINAL CLASSIC (Tepeu 3)
800					LATE HOBO			
				ABRIL 2		LATE CLASSIC b (Tepeu 2)	LATE CLASSIC b (Tepeu 2)	LATE CLASSIC b (Tepeu 2)
700					EARLY HOBO			
				ABRIL 1	PAKOC	LATE CLASSIC a (Tepeu 1)	LATE CLASSIC a (Tepeu 1)	LATE CLASSIC a (Tepeu 1)
600	ACBI	ACBI	BALCHE			TZAKOL	TZAKOL	TZAKOL

Lowlands was obtained (A. Chase and P. Rice [eds.] 1985; Sabloff and Andrews [eds.] 1986; Pendergast 1985, 1986). It became apparent that the occupation of many sites in the Southern Maya Lowlands continued into the Postclassic period, or extended even to the Colonial period. Thus from then on, the Terminal Classic was perceived not only as a period when Maya civilisation had collapsed, but also as a transitional period which gave way to a new, occasionally diverse Postclassic reality. In addition, research of the Petexbatun Archaeological Project conducted between 1989 and 1994 in the Petexbatun region revealed that some of the Maya centres had declined before the Terminal Classic began in the Southern Lowlands (Demarest 1997, Demarest et al. 1997). In a new volume on the Terminal Classic period in the Maya Lowlands published in 2004, Demarest, Rice and Rice aptly call this period not only a time of downfall, but also a time of transformation and transition (Demarest, Rice and Rice 2004 [eds.]).

The exact dating of the Terminal Classic period is still very controversial. Based on research carried out in Uaxactun, Smith (1955: 106–108) assumed that the Tepeu 3 phase began around AD 830 or at the beginning of Cycle 10 (10.0.0.0.0), and ended sometime after AD 889 when the last carved monument in Uaxactun (Stela 12) was dedicated. In the case of the Terminal Classic Eznab phase in Tikal, Culbert claims that Eznab pottery came into use by AD 830 (Culbert 1973b: 89) [later he shifted that date to AD 850 (Culbert 1993, 2003)] and that the last dated monument from Tikal – Stela 11, dedicated in AD 869, (to which no pottery from any chronological phase can be attributed), actually belongs to the the Terminal Classic. He also “feels that Eznab may have lasted about 100 years” (Culbert 1973b: 89). Therefore, we are not certain exactly when Terminal Classic pottery first came into use or how long it remained in many of the Maya sites. Scholars ascribe varying dates for the Terminal Classic in the centres of the Southern Lowlands (Table 1); at Calakmul this period is dated to ca. AD 800–900/950 (Braswell et al. 2004); at Seibal to AD 830–930+ (Tourtellot and Gonzalez 2004); in the Petexbatun region to AD 830–930 (Demarest 1997, Demarest et al. 1997); at Caracol to AD 790/800–1000+ (Chase and Chase 1996, 2004); in Copan to AD 800–900/950 (Fash et al 2004, Sharer 1985); in Quirigua to AD 800–900 (Sharer 1985); in Xunantunich to AD 780–890 (Le Count et al. 2002) and in La Joyanca to AD 850–1000 (Arnauld and Forné 2004).

It is clear that the Terminal Classic did not start or end at the same time in the various centres of the Southern Lowlands. However, based on ceramic evidence, the Terminal Classic in this area can be generally said to have lasted from c.a. AD 780/830 to 950/1000. In the Northern Lowlands the limits are even wider, between AD 700 and 1050/1100 (see: Demarest, Rice and Rice [eds.] 2004). Most archaeologists working in the Triangulo Park area date the Terminal Classic to the period between ca. AD 850–950 (Fialko et al. 2002, 2003, 2004; Hermes 2001, 2002, Hermes et al. 2002). These dates are based on similarities with the Tikal ceramic sequence. Nevertheless, it should be emphasised that we do not have any C¹⁴ dates for the Terminal Classic in the centres of Triangulo Park and it is possible that the beginning and the end of this period can differ substantially from the dates given above (for further information see: Chapter IV). This is even more likely if we consider the fact that, based on radiocarbon data, the Terminal Classic in Xunantunich, which is situated not far off to the east from the park, occurred between ca. AD 780 and 890 (Le Count et al. 2002).

The collapse and demise of most Classic Maya polities during the Terminal Classic period is still one of the major riddles in modern archaeology and one of the most fiercely discussed scientific issues. Ever since the first Maya cities were discovered in the jungles of Central America, scientists have been puzzling over the reasons of the depopulation and abandonment of the great civic-ceremonial centres. Numerous explanations have been presented, including (1) ecological and environmental degradation due to overpopulation (Turner and Harrison 1978; Sanders 1973; Culbert 1977, 1988), (2) climate changes (Curtis et al. 1996; Gill 2000; Haug et al. 2003; Hodell et al. 1995, 2001), (3) peasant revolts (Thompson 1954, 1966), (4) revolts by the nobles (Fash 2001), (5) intensification of warfare (Demarest et al. 1997), (6) foreign invasion (Adams 1971, 1973b; Sabloff 1971, 1973; Sabloff and Willey 1967), (7) trade theories which propose that the Maya were outcompeted and cut off from essential external resources of wealth (Rathje 1973, Webb 1973), (8) diseases (Wilkinson 1995) and others.

Archaeological data increasingly indicates that the factors that played a vital role in the demise of the Maya most probably included overpopulation, degradation of the natural environment, intensification of warfare and climate changes resulting in a prolonged drought. In most of the Maya Lowlands, the decline manifested itself in terms of a drastic depopulation, cessation of monument dedication and architectural activity as well as the cessation of the manufacture and distribution of many prestigious and ritual goods that were patronized by the Maya elites. What disappeared was a system of states ruled by divine kings (*k'uhul ajaw*) with all their funerary cults, carved monuments, pyramid-temples, as well as networks of polychrome ceramics redistribution, ornaments, and exotic goods (Sharer and Traxler 2006).

It is fairly clear that no single factor was responsible for the demise and changes that took place during the Terminal Classic in the Maya Lowlands. The fact that some centres declined before others points to a combination of causes that were not contemporaneous. Moreover, “the causes would not have combined or acted everywhere in the same way” (Sharer and Traxler 2006). It is plausible that the changes that took place in the Terminal Classic might have been different at each site or polity. While in Petexbatun, and probably also at least in some sites of the Usumacinta region, intensification of warfare played a key role in the demise of Maya centres; in other regions such as the Central Peten or Copan Valley, the consequences of overpopulation and degradation of the natural environment were probably the most important factors contributing to the collapse.

Ascribing a time frame to the Classic Maya demise is another problem. Although the centres situated in Petexbatun region collapsed in the second half of 8th century and early 9th century before the Terminal Classic had begun, other centres such as those situated in the Northern Lowlands collapsed much later, between ca. AD 950–1050. Thus, the so-called ‘collapse’ covers the time span of 300 years. Moreover, in some sites, such as those located in the Northern Lowlands, or in the Southern Lowlands, including Nakum in the area of the Triangulo Park, the Terminal Classic period was a period of their greatest development and prosperity. Some of the Lowland centres situated in Belize, in the area of the Central Peten lakes or in the Mopan Valley did not experience collapse at all and continued to develop well into the Postclassic or even the Colonial period. Thus, some researchers argue that the term ‘collapse’ should not be applied to Maya civilisation and go so far as to deny the occurrence of the Classic Maya collapse

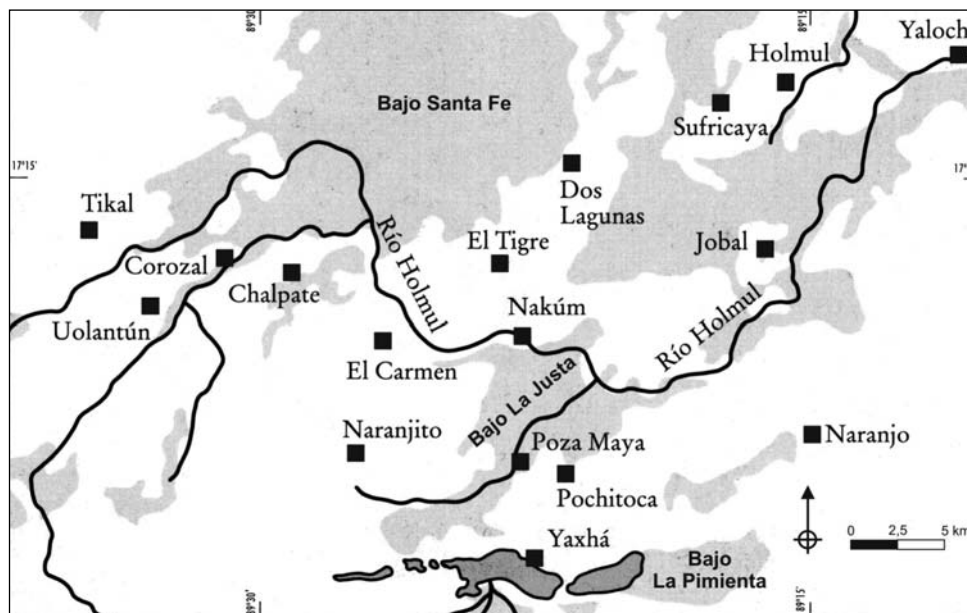
(Chase and Chase 2004a). Perhaps we should be saying that the Classic Maya civilisation as a whole did not collapse; rather, it underwent a significant transformation during the Terminal Classic period. 'Collapse' is thus a term which is more applicable to institutions within Classic Maya society that did not survive the Terminal Classic period (Sharer and Traxler 2006). We should also mention that the Maya as a group with a common culture and speaking languages belonging to the same language-family survive to this day. Today, many of them are experiencing a cultural and linguistic florescence (Rice, Demarest and Rice 2004).

Chapter II

TRIANGULO PARK – DEFINITION, GEOGRAPHICAL ENVIRONMENT, HISTORY AND METHODOLOGY OF RESEARCH

DEFINITION AND BORDERS OF TRIANGULO PARK. GEOGRAPHICAL ENVIRONMENT

The area of the Triangulo Park or the Yaxha-Nakum-Naranjo National Park, which is the subject of this book, is located in the north-eastern part of the Peten Department in



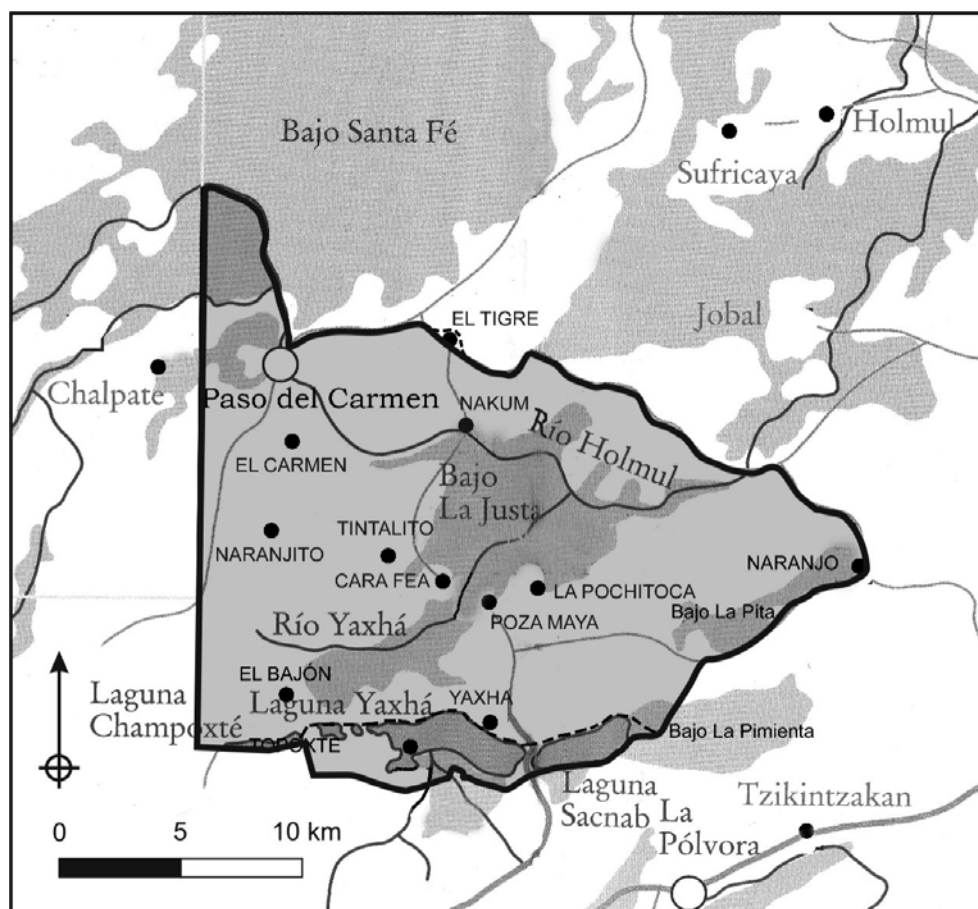
2. Map of the Holmul Valley showing key archaeological sites (by A. Danecki, based on Quintana and Wurster 2002: fig. 2)

Guatemala, adjoining the eastern border of the Tikal National Park (Figs 1 and 2). The area was recently defined during investigations of the *Proyecto Protección de Sitios Arqueológicos en Peten* or Triangulo Project. However, it should be emphasised that the Triangulo Project research extended much beyond the area of the park since it also covered the area of Tikal National Park, sites situated to the north and north-east of Triangulo Park and many others located to the south of lakes Yaxha and Sacnab and to the south of the road linking Flores with Melchor de Mencos. The borders of Triangulo Park were finally set several years after the commencement of the Triangulo Project research and were presented in a number of recent publications summarizing many years of studies (Quintana 2002; Quintana and Wurster 2001). The Triangulo National Park covers an area of 37,160 hectares and like the Tikal National Park, it was established to protect the area and build infrastructure to facilitate research as well as to promote tourism. Some of the advantages of the park include the presence of a plethora of archaeological sites of varying size as well as a diverse landscape, rich flora and fauna.

The northern border of the park aligns with the forest estate of the Arbol Verde association (Quintana 2002: 261). From the west, the northern border runs along the Holmul River and further along the jungle road leading from Paso del Carmen to the site of El Tigre. From El Tigre, the border runs in the south-eastern direction all the way up to Naranjo, which is the easternmost site in the Park. The southern border of the park runs partly along the road heading to the south-west of Naranjo and then to the south from this route, towards the eastern shore of Lake Sacnab. The area of the park also covers both Lake Yaxha and Sacnab (Fig. 3). Its south-western border runs west of the southern arm of Lake Yaxha, along Lagunas Lancaja and Champoxte. About 2 km west of Laguna Champoxte, the border turns abruptly to the north, joining the south-eastern corner of Tikal National Park. Most of the western border of Triangulo Park adjoins the eastern border of Tikal National Park.

The area described above contains all the sites of interest for this book, but with two exceptions. One is the El Tigre site, situated close to the northern border of the park but formally not located within its area (Fig. 3). The other is a series of sites situated on the islands in Lake Yaxha-Sacnab. These sites were explored in detail in the first phase of Triangulo Project and have been discussed in previous publications (Hermes and Noriega 1998; Hermes 2001; Wurster [ed.] 2000).

Geographically, the area of Triangulo Park comprises three river basins: the southern part of the Holmul Basin, the north-eastern portion of the Los Lagos Basin and the north-western part of the Mopan Basin. The area is diversified topographically; its altitude above sea level ranges from ca. 150 to over 300 m. Among the lowest landscape formations there are 4 *bajos*: La Justa, Santa Fe, La Pita and La Pimienta (Fig. 3). Terrains spreading between *bajos* are flood plains, hilly areas and low mountains. The Holmul River runs across the area of Triangulo Park together with its tributary, the Yaxha River. Pools and marshes originate from and adjoin the river in some places. During the dry season these are crucial sources of water in this area. During the rainy season, the Holmul River overflows and inundates the adjacent lower terrain (Quintana and Wurster 2002: 243). It is supposed that during the Classic period the Holmul River was navigable and served as a major communication and trade route in this region. Proximity to the river



3. Map of north-eastern Peten showing the location of the Triangulo Park (the black, continuous line shows the extent of the park, whereas the intermittent line shows the range of the area analysed in this book), map after Quintana and Wurster 2001 modified by A. Danecki

could have been the main factor that influenced the location of Nakum and other centres situated outside the area of Triangulo Park (e.g. Holmul, Yaloch).

HISTORY OF RESEARCH

Except Topoxte, which was discovered in the first half of the 19th century and described in the report of the governor of Peten (Juan Galino, in 1834), most centres situated in the Triangulo National Park were discovered at the beginning of the 20th century, when the first wave of scientific expeditions explored the jungles of Central America. In 1904, one of the pioneers of Maya archaeology, Teobert Maler reached Topoxte. In the same year,

Maler revealed the ruins of Yaxha to the outside world (Maler 1908); in 1905 he also visited Naranjo and prepared the first plan of that site (Maler 1908). In 1905, another researcher, the French count Maurice de Périgny discovered the Maya ruins of Nakum (Périgny 1908). In 1906 Périgny also took the earliest photographs of the structures on Topoxte Island (Périgny 1909). Périgny returned to Nakum in 1910. He published panoramic views of the most important structures of Nakum along with a schematic plan of the site (Périgny 1910, 1911). Between 1909 and 1937 the most important North American scientific institutions (Carnegie Institution of Washington, Peabody Museum of Harvard University and Tulane University) organized several important expeditions to the north-eastern Peten. In 1910 an expedition from the Peabody Museum at Harvard University reached Nakum under the leadership of Alfred Tozzer and Raymond Merwin. The next expedition from the Museum led by Raymond Merwin returned to Nakum in 1911. The architecture of Nakum was documented and a detailed map of the site was developed during these two expeditions. Several small excavations were undertaken as well. Excavations were limited to clearing 3 chultuns and rooms in Structures E, N, R, as well as the south tower of Temple A (Tozzer 1913: 152–153). Unfortunately, the pottery found in these structures was neither described nor published in Tozzer's report. Only some characteristic ceramic fragments or complete vessels from chultuns appeared in the report (Tozzer 1913). It was only after many years that it became possible to date these ceramics based on the drawings in Tozzer's work.

In 1912 Raymond Merwin reached Holmul, located to the north-east of Nakum. At that site he excavated a pyramid and discovered a succession of superimposed structures (along with tombs) from different chronological periods (Merwin and Vaillant 1932). Knowledge about the Maya was enhanced significantly during the research performed in the 1920s and 1930s at Uaxactun (Ricketson and Ricketson 1937; R. Smith 1937, 1955; L. Smith 1950), where the link between architecture (construction stages of particular structures) and ceramic findings enabled archaeologists to distinguish chronological phases within the Preclassic and Classic periods. In the second and third decade of the 20th century, Sylvanus Morley reached the main centres of the region, i.e. Naranjo, Yaxha and Nakum. Between 1937 and 1938 he published his monumental five-volume work entitled *Inscriptions of Peten*, comprising maps, drawings and photographs of carved monuments from the above-mentioned sites (Morley 1937–1938).

Between 1940 and 1955 no important research was carried out in the north-eastern Peten (Quintana and Wurster 2001: 12). In 1956, the University of Pennsylvania Museum commenced a comprehensive research project at Tikal. After the University of Pennsylvania Museum finished investigations in 1970, the Instituto de Antropología e Historia de Guatemala (IDAEH) initiated the Tikal National Project (*Proyecto Nacional Tikal*). Since the 1980s, this project has also covered centres situated outside Tikal National Park, including the sites of the future Triangulo National Park.

In the 1950s and 1960s, the area of Lake Yaxha was explored by William Bullard. In 1958, 1959 and 1960 Bullard set up short visits to Topoxte. He excavated small test pits and collected many sherds from the surface of the islands, as well as from the mainland around Lake Yaxha. Bullard published the plan of Topoxte, along with plans and photographs of several structures (Bullard 1970).

In 1960s and 1970s several sites located in the Triangulo Region were visited and investigated by different scholars, including Ian Graham from the Peabody Museum at Harvard University and Nicholas Hellmuth. Graham documented all known stelae in Naranjo and prepared a new plan of the site, featuring the location of all carved monuments (Graham and von Euw 1975, Graham 1978). Additionally, Ian Graham visited the small site of La Pochitoca and photographed an inscribed stela located there (Fialko 1999). Between 1969 and 1972, Yaxha was investigated by Nicholas Hellmuth who, along with Miguel Orrego, published a new map of the site. Hellmuth carried out excavations and a test-pitting programme at Yaxha (mainly in Structures 34, 90 and Plaza C). He also collected artefacts from the surface in many other complexes at this site (Hellmuth 1993). In 1971 and later in 1973, Hellmuth also visited Nakum and prepared a new plan of the city, including new structures which were overlooked in the previous surveys (Hellmuth 1975, 1992). Hellmuth did not carry out any archaeological research in Nakum during his visits since he only “wanted to work out the overall site plan” (Hellmuth 1992).

The 1970s and 1980s brought great change in the research of the Triangulo region and its environs. Between 1972 and 1981 several related investigations coalesced under a common name, the Central Peten Historical Ecology Project. This project investigated the Central Peten Lakes area as well as the basins of lakes Yaxha and Sacnab (Rice and Rice 1980, 1990). The project was then continued in 1994–1998 by the *Proyecto Maya Colonial* (Pugh et al. 1998, Rice and Rice 2004). The research by the Central Peten Historical Ecology Project focused on marking out many transects around the Central Peten lakes, including lakes Yaxha and Sacnab. The transects were surveyed to locate and document mound structures and architectural complexes. Test pits were opened later in selected residential compounds. The basic unit used for this test pitting programme was the individual structure rather than patio groups (as in the case of investigations of the Tikal Sustain Project [Fry 1969]) 25% of all platform structures were investigated within the boundaries of each of the transects that were marked out around lakes Yaxha and Sacnab. Test-pits were not opened in the vicinity of the structures, but inside them, and penetrated the fill of the building platform. Although transects marked out in the basins of lakes Yaxha and Sacnab did not cross any of the great Maya centres (although two transects flanked the Yaxha site from the east and the west), the Rices gathered large amounts of archaeological material from the epicentre of Yaxha, including numerous sherds dating from the Terminal Classic.

In 1978 Anabel Ford carried out the so-called Intersite Project that aimed at researching a transect 0.5 km in width, which linked Tikal with Yaxha (Ford 1986). Ten percent of all residential units discovered in the transect were studied by this Project. First, the groups were probed with a posthole-digger. Then, 2 x 0.75 m test pits were opened at the spots where the most intense concentration of cultural material was detected. Research by the Rices and Ford revealed very important information concerning the dating and settlement patterns of the rural and intersite areas.

In the 1980s the Tikal National Project extended its research outside the Tikal National Park. Between 1982 and 1990 the project carried out excavations in Uaxactun and, beginning in 1989, it included the Triangulo region within its research, where a new project, i.e. *Proyecto Protección de Sitios Arqueológicos en Peten* (PROSIAPETEN) or

Proyecto Triángulo Yaxha-Nakum-Naranjo, was created. Oscar Quintana was the Technical Coordinator of this project from 1989 to 2005. In 2006 Julio M. Sánchez took over as the Technical Coordinator.

The Triangulo Project began its research with salvage and protection efforts in the most deteriorated buildings located in Yaxha, Nakum and Topoxte. In 1989 the Guatemalan Ministry of Culture and Sport applied to the German government for technical and financial support. Since that year, there has been extensive official cooperation between both parties. The German effort has been represented by KAVA (Kommission für Allgemeine und Vergleichende Archäologie, Bonn). KAVA provided funding as well as specialists in archaeology; it has also published results of investigations carried out by the Triangulo Project. In 1993, financial assistance for the Project was granted by the Federal Department of Economic Cooperation and Development (Ministerium für Wirtschaftliche Zusammenarbeit und Entwicklung, BMZ). Planning, control of all the work within the Project and finance administration have been managed by German Cooperation for Development (Kreditanstalt für Wiederaufbau, KfW), headquartered in Frankfurt (Quintana and Wurster 2001: 15). In 1999 Polish archaeologists from the Jagiellonian University in Cracow and from Warsaw University joined the Triangulo Project as well, participating in the research carried out in Nakum, Yaxha, Naranjito and El Tigre. Volunteers from Germany and France have been involved in the project as well.

The Triangulo Project has been implementing three main scientific programmes. These are: The Regional Archaeology Programme (*Programa de Arqueología Regional*), the Main or Major Sites Archaeology Programme (*Programa de Arqueología Local*) and the Salvage Programme (*Programa de Rescate*). Apart from the aforesaid projects, additional studies, particularly concerning the natural environment (flora and fauna studies) and ethno-historic documents (from 16th to 18th centuries) referring to the north-eastern Peten, have been carried out as well (Quintana 1999, 2002; Quintana and Wurster 2001).

The Regional Archaeology Programme focuses on the research of the areas that lie between the great centres and also on the exploration of secondary centres. The research of the Regional Archaeology Programme consisted of three phases coordinated by Vilma Fialko. During the first phase (carried out between 1994–1996), several transects joining the most important sites of the Triangulo Park and others situated outside this area were marked out (Yaxha-Naranjo, Yaxha-Nakum, Nakum-Tikal and Tikal-El Zotz) (Fialko 1996a, 1996b, 1997a, 1997b, 1997c, 1997d, 1999). This research focused mainly on archaeological surveys conducted in the area of the marked transects and their environs, the documentation of looters' trenches and the test-pitting and shovel-test excavations. The second phase (from 1997 to 1999) focused on investigations of the minor centres located between Tikal, Yaxha, Nakum and Naranjo. Amongst others, the following centres were investigated during this phase, namely, Poza Maya, Tintalito, La Pochitoca, La Naya, Holtun, Ixtinto, La Blanca, Corozal, Uolantun, Chalpate, Naranjito, Socotzal, El Zapote, Jahuia, El Tigre, Laberinto, Cara Fea, Xateros, La Tractorada and Kanajau. The third phase of the Fialko investigations lasted from 1999 to 2004 and consisted of a survey of the Holmul River Valley and adjacent *bajos*, starting from the source of the Holmul River (north of Lake Macanche) and finishing close to the Guatemalan-Belizean border, where the Holmul River changes its name to the Bravo River (Fialko 2005b). The Regional Archaeology Programme had a very fruitful collaboration with

Patrick Culbert from Arizona University and Thomas Sever from NASA. This collaboration included the studies of *bajos* and river valleys aimed at searching and documenting pre-Hispanic agriculture, as well as investigating *bajo* communities (Culbert et al. 1996, 1997; Fialko et al. 1999; Kunen et al. 2000; Sever and Irvin 2003).

The Main or Major Sites Archaeology Programme focuses on research of the strategic or largest centres located in the area investigated by the Triangulo Project. The research comprises archaeological explorations in the largest and most impressive architectural complexes, as well as renovation and reconstruction work aimed at making the ruins available for tourism. Additionally, vegetation in the courtyards and on the structures of the major sites is controlled. The following strategic centres have been researched under this programme: Topoxte, Nakum, Yaxha and Naranjo. It should be emphasised that from an archaeological perspective the sites explored within this programme brought the greatest amount of information about pre-Hispanic settlement, construction stages and stratigraphic relations of particular complexes and individual structures that is very important to the present work. Due to the consent of the Triangulo Project director, Oscar Quintana, it was possible to carry out additional work as part of the Main Sites Archaeology Programme to record settlement patterns in the peripheries of Nakum (Olko 2002; Hermes, Žračka and Calderón 2005) and to document numerous graffiti in the central part of this city (Hermes, Olko and Žračka 2001, 2002).

Activities under the Salvage Programme comprise the entire area of Triangulo Park and also some sites located outside the park. Its main objective is to document the actual preservation state of particular sites in the research area, define priorities for architecture conservation and carry out wide-ranging activities to prevent the structures at the particular sites from destruction and collapse (Quintana and Wurster 2001: 17). Within the Salvage Programme, looters' trenches are marked on the maps or plans of the sites. As soon as funds are available, their documentation is prepared and a limited test-pitting programme is implemented in order to gain basic chronological information. Major centres explored recently within the Salvage Programme have been Naranjito and El Tigre (Chan 1999a, 1999b).

As of now, Nakum and Yaxha are the most thoroughly studied and investigated mainland sites in the Triangulo Park. Archaeological research carried out by the Triangulo Project at both sites focused on excavating and exposing essential structures in the chosen architectural complexes. The explored structures were reconstructed afterwards. In particular, the excavations concentrated on opening test-pits in the courtyards adjoining the explored structures to obtain information about stratigraphic relationships between particular structures and courtyard floors as well as between several adjacent structures. A great number of excavation units were situated around the explored structures (in front, on both sides, or in the back of the structure) in order to expose masonry components, record their dimensions and prepare them for reconstruction. At the same time, in case of each explored structure in the epicentre of Yaxha and Nakum, one or more tunnels or trenches were excavated to penetrate the fill of the structure to obtain dating evidence. All the construction stages defined for individual structures were dated on the basis of the pottery present in the fill of the structure and/or its particular elements (e.g., stairway blocks, benches, balustrades etc.). Whenever possible, structures were dated by the contents of primary deposits such as burials and offerings which could be strati-

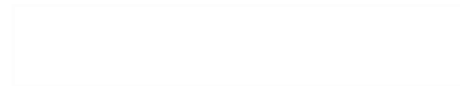
graphically linked either to the respective construction stages of the building or to the entire structure.

Archaeological research at another important Triangulo Park site, Naranjo, has so far been focused mainly on the documentation of looters' trenches (over 200 trenches have been registered in the city [Fialko et al. 2003]). Despite the severe damage they caused, information can be salvaged from looters' trenches by recording the respective phases of a particular structure that are still visible in its profiles. Apart from the documentation of looters' trenches in Naranjo, many test-pits were recently made and larger excavation units were opened in the most important architectural complexes in the city centre (Fialko 2004a, 2004b, 2005a; Fialko et al. 2002, 2003, 2004).

The research carried out at the secondary sites or intersite area was slightly different, especially at the sites explored within the Regional Archaeology Programme. In these cases, archaeological studies were limited mainly to opening a few test-pits or shovel tests, and/or documentation of looters' trenches, due to the lack of archaeological resources, inaccessibility and sometimes even the risk of carrying out research at the centres. The profiles of most looters' trenches at these sites reveal the respective construction stages of the given structures. Small archaeological probes were made to obtain additional archaeological material related to respective architectural stages documented in the profiles of looters' trenches. However, it should be stressed that small test-pits and probes are not sufficient to reveal the settlement or construction history in particular centres or architectural complexes. Yet, they do furnish some general, though incomplete information about the dating and functioning of a given centre or chosen architectural complex within the site. Thus, data based only on test-pits should be treated with utmost caution as far as these sites are concerned.

Finally, it should be mentioned that between 1998 and 2006, a new project in the Triangulo Park region called the *Programa de Desarrollo Sostenible de Peten (PDS, Componente II)* conducted research at Yaxha. Within this project, archaeological research and reconstruction of the structures situated in the area of the Maler Group, the North Acropolis, the East Acropolis, the West Group, the South Acropolis (Patio 4), one ballcourt (Structures 395 and 396), Structure 90 and Structure 152 were carried out (Hermes 2003, 2006a, 2006b). The scope of archaeological research carried out by this project is in most cases limited since it focuses mainly on surface excavations in order to expose and reconstruct structures.

In 2006, a new project commenced at Nakum. The project is carried out by the Jagiellonian University, Cracow, Poland and directed by Wiesław Koszkuł and Jarosław Żrałka. Its main focus is the investigation of the North Sector of Nakum as well as several structures located in the southern part of the site.



Chapter III

ANALYSIS OF TERMINAL CLASSIC OCCUPATION IN THE AREA OF TRIANGULO PARK

This chapter presents an analysis of Terminal Classic occupation in the Triangulo Park area. In the first part, the three main centres of this area (Nakum, Naranjo and Yaxha) are analysed in alphabetical order. Each centre is described using the following criteria: 1) Location, 2) History of investigation, 3) Description of the site, 4) An outline of the prehispanic occupation at the site, 5) Analysis of Terminal Classic occupation at the site, 6) Postclassic occupation at the site and 7) Conclusions. Secondary centres are covered in the second part. Sites showing important evidence of Terminal Classic occupation are analysed first, followed by a description of other minor centres. The final part of the chapter provides information concerning Terminal Classic occupation in the intersite areas.

NAKUM

1. Location

Nakum is located 11 km north of Lake Yaxha at an elevation of c.a. 200 m above sea level. Its geographical coordinates are: latitude 17° 10' 27" and longitude 89° 24' 23".

2. History of investigation

The discovery of this site is attributed to the French count Maurice de Perigny (in 1905), who published the first map of the site (Perigny 1910). Perigny returned to Nakum during his next expedition of 1909–1910. Further reconnaissance was carried out during two brief expeditions organized by the Peabody Museum of Harvard University under the direction of Alfred M. Tozzer. Tozzer and Raymond E. Merwin produced plans of the major structures as well as a general map of the site (Tozzer 1913). Subsequently, the site was visited by Sylvanus G. Morley of the Carnegie Institution of Washington once in 1915 and several times in the 1920s. In his famous work, *The Inscriptions of Peten*, Morley included drawings and photographs of the inscribed stelae from Nakum as well

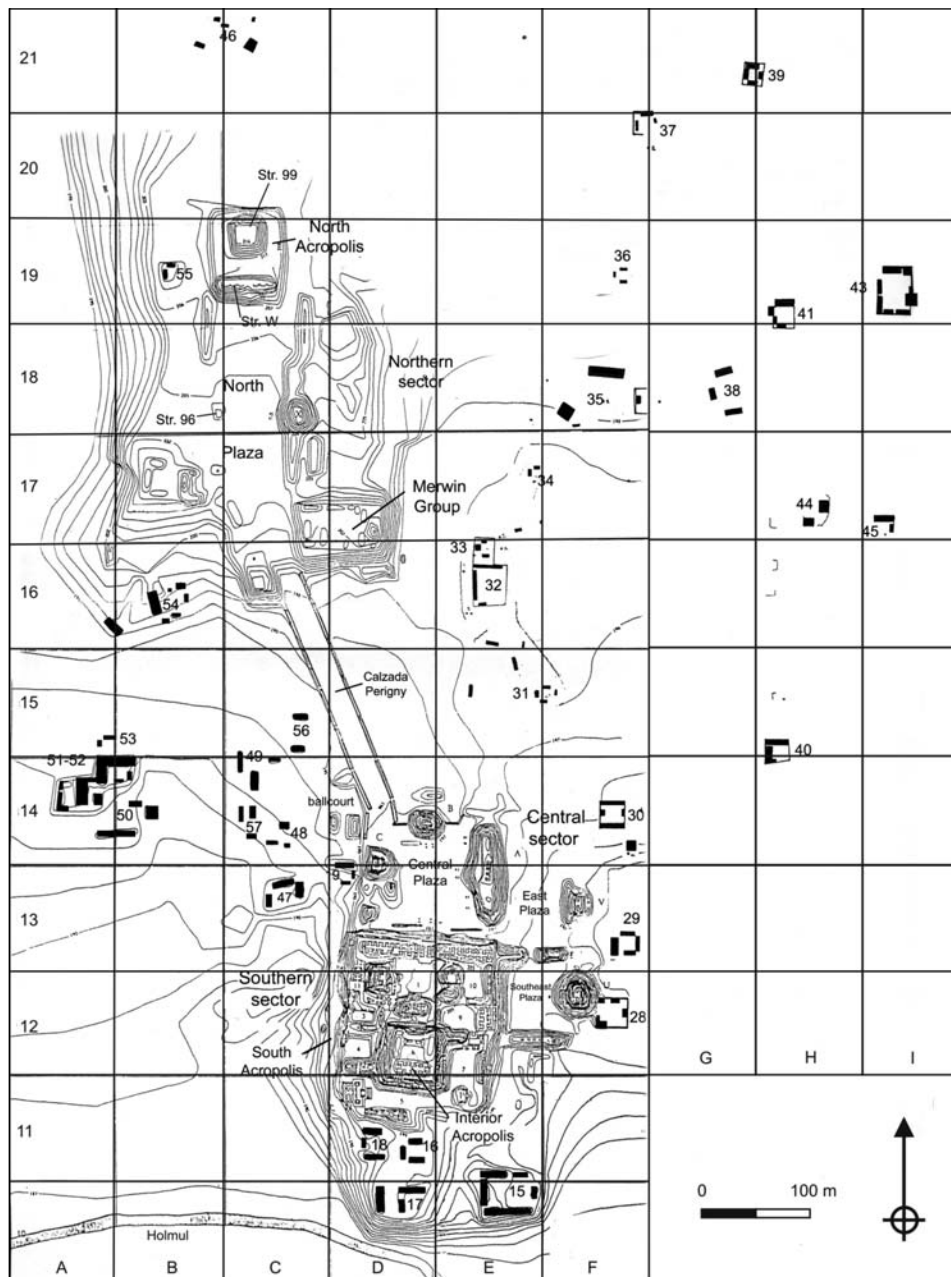
as an updated plan of the site based on Merwin's Map (Morley 1937–38 vol. II, 7–21; vol. V, part 1, plates 13, 86; part 2, plate 194). No further work was done until the visit of Nicholas Hellmuth in 1971 and then in 1973 (Hellmuth 1975, 1992), which resulted in some corrections of the existing maps and a further description of the ruins. Since that time, work done at the site has been under the authority of the Instituto de Antropología e Historia of Guatemala (IDAEH). In 1989, IDAEH initiated efforts to salvage and protect buildings in the core area as part of Tikal National Project. Formal investigations were initiated in 1994 with excavations and restoration of the most deteriorated monumental structures located in the Central and South Sectors of the site. Another line of research focused on the complete documentation and contextual analysis of the Pre-Columbian graffiti identified in the exposed architectural remains at the core of the site (Hermes, Olko and Żrałka 2001; 2002). In 2002, a new map of the central part of Nakum was published by Quintana and Wurster (2002). The authors changed the existing names of most of the architectural complexes¹.

Between 2001 and 2003 investigations were also carried out at the periphery of the site leading to the discovery of many new habitational compounds (Hermes, Żrałka and Calderón 2005). Finally, in 2006, a new project under the direction of Wiesław Koszkul and Jarosław Żrałka from the Jagiellonian University started excavations at Nakum. The project focuses mainly on the Early Classic and Terminal Classic occupation at the site.

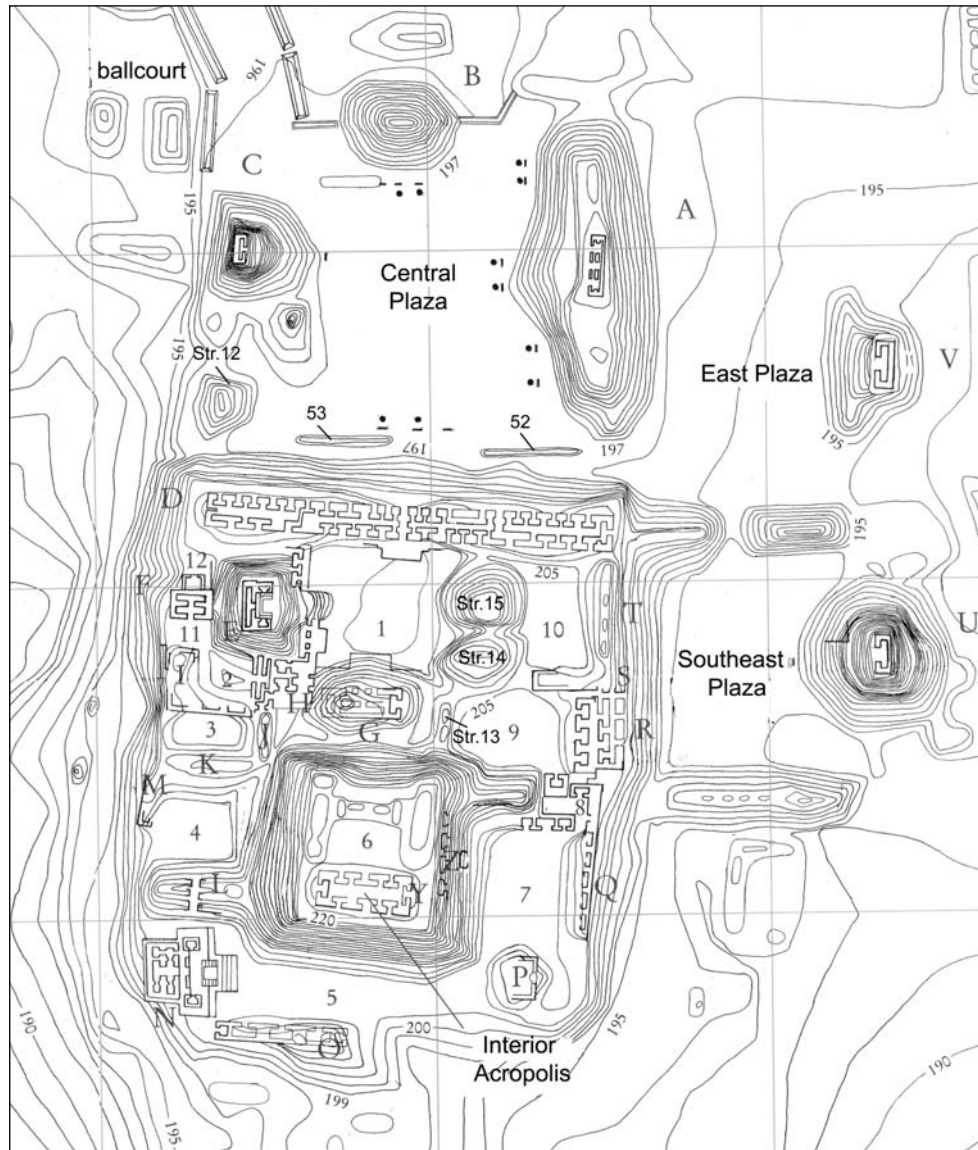
3. Description of the site

The site has a north-south orientation, is approximately 1000 m long with an east-west axis that does not exceed 500 meters (Fig. 4). The core of Nakum is divided into three sectors (North, South and Central). The North Sector is formed by a spacious plaza (North Plaza) delimited from all sides by low platforms as well as by large complexes and one pyramid-temple structure (Structure X or 104). The northern part of the plaza houses the North Acropolis, a four-building complex. The Merwin Group is a massive platform topped by 14 buildings and it occupies the south-eastern corner of the North Plaza. The North and Central Sectors of the site are connected by an elevated causeway, Calzada Perigny, about 250 m long and 30 m wide. A small ballcourt (Structures 7 and 8) is located at the southern end of the causeway. The Central Sector of the site is arranged around two large Central and East Plazas (Fig. 5). The Central Plaza is delimited by Structure D (122 m long palace) from the south, Structure C (temple-type), Structure 12 (circular building) and a ballcourt to the west, Structure B (temple-type) to the north and to the east by Structure A, a high temple platform with an upper central room topped by a decorative crest-like roof and four lateral Structures (1–2 and 3–4) adjacent to the north and south. Thirteen stelae (two inscribed) along with ten altars are located in the area of the Central Plaza. The East Plaza with its principal building (Structure V) is lo-

¹ In this book, the author follows the old terminology for the architectural complexes of Nakum. However, it should be mentioned here that Quintana and Wurster (2002) changed the names of the following architectural groups: North Acropolis was changed to North Group, Merwin Group was changed to East Group, South Acropolis to Acropolis and Interior Acropolis to Central Acropolis.



4. Map of Nakum including all patio groups on the peripheries (marked with black colour), map after Quintana and Wurster 2002, with corrections made by the author



5. Nakum. Map of the Central and Southern sectors of the site (after Quintana and Wurster 2002, modified by the author)

cated in the space to the east of Structure A². The South Sector encompasses the Southeast Plaza and the South Acropolis with 12 courtyards. The Southeast Plaza is surrounded by

² Some scholars prefer to distinguish only two sectors in the epicentral part of Nakum (the North and South Sectors which are connected by Perigny Causeway). In this case, the Central Sector with its architectural complexes is encompassed by the South Sector.

buildings from all sides: to the east by a huge pyramid (Structure U), to the north by two large structures (no. 34, 35) and to the south by a long building (Structure 33) with two smaller residential groups behind it (Patio Groups 13 and 14). The western side of the Southeastern Plaza is delimited by the base of the South Acropolis which consists of a huge architectural platform topped mainly by palace-like structures grouped around 12 courtyards called patio groups (Fig. 5). Each interior courtyard of the Acropolis is unique in the proportions and size of its delimiting structures. This architectural compound is highly compact and conveys a sense of privacy. The highest point and the heart of the South Acropolis is an Interior Acropolis consisting of a massive platform of great height topped by five structures. This complex was probably the seat of the royal lineage of Nakum. West of the South Acropolis, there is a reservoir that fills up with water in the rainy seasons.

The above-described architectural compounds and buildings form a rather compact monumental core area. All structures and architectural groups located outside this central part are referred to as peripheral, as can be seen in Figure 4.

4. An outline of the prehispanic occupation at the site

Although ceramic sherds of Pre-Mamom affiliation were found in the deep-fill of some of the complexes and plazas in Nakum, the first evidence of construction activity dates to the end of the Middle Preclassic (500/450–300 B.C.). This period saw the construction of the first version of the Merwin Group in the form of a platform between 25 and 30 m long at its base and 2.2 m high, with a stairway which encompassed its western side and western ends of northern and southern facades. Other Middle Preclassic constructions were discovered in the South Sector of the site where the first version of the South Acropolis and a large 40 m long platform (Structure G Sub-1) which topped this complex were built. The excavations indicate that the northern facade of the South Acropolis might have been between 45 and 50 m long (E-W). At that time, the South Acropolis could be reached by a stairway from the level of the Central Plaza. The first version of the Interior Acropolis was also constructed during the Middle Preclassic period. It consisted of a three-terraced platform 12.75 m high and 20 m long on one side. Excavations indicate that the Interior Acropolis platform had stairways on more than one side and it was embellished with stuccoed masks. Vestiges of a 2 m high structure, located on the platform of the Interior Acropolis were also detected in the northwestern part of this version of the complex. It seems most probable that this construction formed a triadic pattern complex with two other platforms which have yet to be discovered (Calderón et al. 2004: 48).

The examples of public architecture mentioned above indicate that at the end of the Middle Preclassic, Nakum must have been an important site. It was probably governed by a group of elites and a king with sufficient political and economic power to undertake such a monumental building programme.

In the following Late Preclassic period, both the Merwin Group and the Interior Acropolis underwent significant modifications. New research carried out by the Triangulo Project indicates that at the beginning of the Late Preclassic period the Interior Acropolis

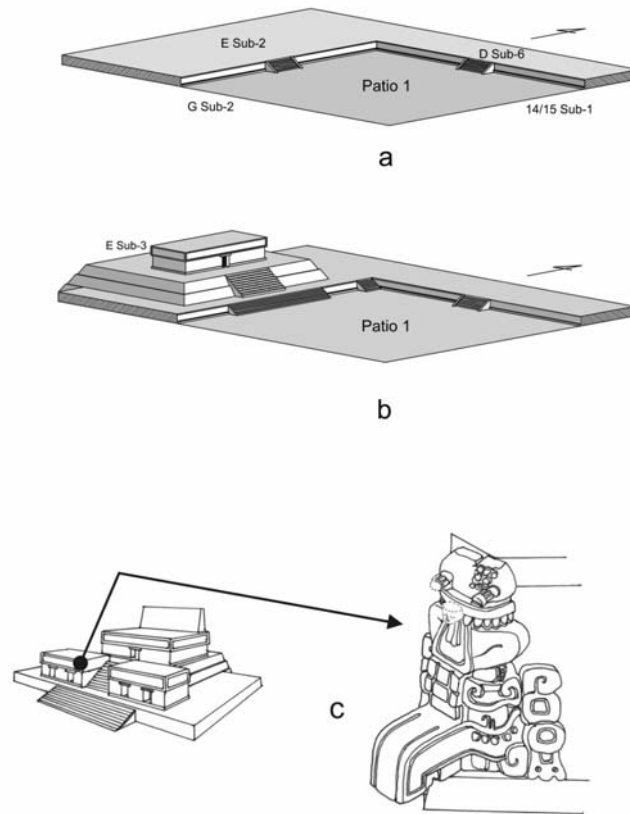
was rebuilt; it consisted of a platform surmounted by three buildings arranged in a triadic pattern. The most well studied construction of this triadic complex is a structure to the west that is decorated with large stuccoed masks representing a jaguar. The northern wall of the Interior Acropolis platform was decorated with a beautifully rendered frieze representing supernatural beings of the Maya pantheon (among them a bicephalic serpent showing clear influences of Olmec art) (Calderón et al. 2004). The Late Preclassic period also saw the construction of a residential building (Structure D Sub-1) in the northern part of Patio 1 of the South Acropolis, followed by Structure D Sub-2. A platform located in the centre of Patio 1 and connected by means of a wall with Structure D Sub-2 was also built during the Late Preclassic period.

During the final stage of the Late Preclassic or Protoclassic period, the level of Patio 1 was elevated 3 metres and covered all the structures which had been built earlier (Structures G Sub-1, D Sub-2 and a structure located in the centre of Patio 1). This remodelling gave way to the construction of a new version of the South Acropolis. Subsequently, a new structure was constructed at the northern end of the South Acropolis platform (new version of Structure D). The Interior Acropolis was also rebuilt during this period. The triadic pattern complex was sealed and the platform of the Interior Acropolis was enlarged. However, it did not support any buildings and was plain at the top.

A test-pitting programme by the Triangulo Project along with the new excavations by the Nakum Archaeological Project indicate that the first version of the North Acropolis or the North Group was built during the Late Preclassic. In the final part of this period (Protoclassic) a large rectangular platform (Structure 99) was constructed at the northern end of the North Acropolis. The Late Preclassic period also saw the construction of the Perigny Causeway which for the first time connected the northern and southern parts of the site.

So far, Early Classic construction activity at Nakum was only documented in Patio 1. In the first part of the Early Classic period the first version of Structure E, along with a new version of Structure D were constructed. These constructions were low platforms. Recent investigations by the Nakum Archaeological Project in the area of Structures 14/15 indicate that during the Protoclassic and the beginning of the Early Classic periods, two separated low platforms existed below these constructions (Żrałka et al. 2007). In the second part of the Early Classic (Tzakol 3 phase) Patio 1 underwent an important building programme. From the west, north and south the patio was enclosed by *talud-tablero* style platforms (Structures E Sub-2, D Sub-6 and G Sub-2) (Fig. 6a). From the east, Patio 1 was partly enclosed by *talud-tablero* style construction which was added to the earlier platform built in the typical Maya style (wall in a *talud* style). The discovery of *talud-tablero* style architecture as well as other finds at Nakum (cylindrical tripod vessel from Offering 11 and green obsidian) point to the strong influence of Teotihuacan culture in Nakum during the Early Classic period. It is likely that the appearance of this influence is related to the activity of Siyaj K'ak' in Peten. We can not rule out the possibility that the expeditions of Siyaj K'ak' to various parts of the region may have included Nakum (Hermes et al. 2006, Koszkuł et al. 2006).

Nakum developed significantly during the Late Classic period (A.D. 600–800). The site flourished during the initial part of this epoch, which in some sites of the Southern Maya Lowlands is characterized by a political crisis and a halt in the erection of in-



6. Nakum. Reconstruction view of Patio 1 with Structure E during Tzakol 3 (a) and Tepeu 1 (b) phases (drawings by A. Witkowska); c) Structure E during E Sub-5 stage with drawing of a masonry mask decorating the upper corner of the southern building; (redrawn by K. Radnicka after Hermes 2002: fig. 1.3 and Calderón and Toraya 2002: fig. 5, Proyecto Triángulo, IDAEH)

scribed monuments. The first four versions of Temple A – the most important structure of the Central Plaza – were built during this span of time. The two subsequent stages of this construction are from the second part of the Late Classic (Tepeu 2). Excavations indicate that during the first three versions, Structure A was a pyramidal platform with a stairway on its eastern facade. It was plain at the top. During the fourth stage we observe a major change in the architectural form of Structure A. It was enlarged and a temple building was constructed at the top of the pyramid platform. The temple had two narrow vaulted chambers (east and west chamber) and a beautifully embellished roof comb (Fig. 76). Communication between the two chambers was through a rectangular

doorway located in the central part of the wall separating them. Moreover, the main facade with a stairway was switched to the western side of Structure A. It is possible that another pyramid of the Central Plaza (Structure B) was also built during Tepeu 1 times although it has not been excavated so far.

Major construction activity during the first part of the Late Classic period (Tepeu 1) is evidenced mainly in the South Acropolis. Of special interest are Structures D and E, which were being successively rebuilt during the course of the Late Classic. At the beginning of the Late Classic, Structure D (stage D-1) housed 6 vaulted chambers constructed on the earlier *talud-tablero* platform and was enlarged to 19 chambers at a later date (Tepeu 2). The first Late Classic stage of Structure E was also built on the summit of the Early Classic *talud-tablero* construction and consisted of a platform topped by a structure with two chambers (stage E Sub-3, [Fig. 6b]). The next significant remodelling is seen during the fifth architectural stage (E Sub-5, [Fig. 6c]) when the structure at the top of the platform was rebuilt and its space was reduced to only one chamber with a bench at its centre. Concurrently, two new residential structures (each containing two chambers) were built in the front of the above mentioned structure. The upper corner of the southern structure was decorated with a large deity mask and a man seated upon it (Fig. 6c). Excavations carried out inside the upper (main) building of the Structure E Sub-5 yielded a rich cache from inside the bench, containing an anthropomorphic head and 4 tubular beads in the form of a human skull made from greenstone, 6 valves and one pearl, coral remains and two knives, each almost 0.50 m long and made of obsidian and flint. The northern doorjamb of the same structure was also covered with a band of 7 glyphs painted red.

During the second half of the Late Classic period, Structure E was rebuilt to a pyramid topped by a large chamber (stage E-1). At the base of the pyramid, two structures dating back to the previous architectural stage were still in use. Another important residential structure which provides an example of the Late Classic architectural sculpture is a set of three buildings called N/60/61 which were constructed in the southwestern part of the South Acropolis. One of the earliest versions of this structure consisted of a platform topped by two chambers with a stairway placed between them that led to the upper level, which housed a rectangular building. The exterior parts of the two vaulted chambers flanking the stairway were decorated with two large stucco reliefs, both representing birds (one of them quetzal) as well as with glyphic representations which have only partly survived. During the subsequent Late Classic stage, the reliefs were covered with fill and two new chambers were constructed on the upper level of Structures N/60/61. Structure N/60/61 was rebuilt at a later date and a new version of a stairway was constructed on its main eastern facade.

During the Late Classic period in the northwestern part of the South Acropolis, two residential constructions (Structures F and I) were also built. Structure I had three chambers while Structure F consisted of two chambers and could be accessed from the north. The latter construction was built at the back of Structure E. During the Late Classic period a narrow passageway connecting Patios 11 and 12 was formed between the above-mentioned buildings.

Some significant architectural additions were also made during the Late Classic in the eastern part of the South Acropolis where the first versions of Structure R (which at that



7. Nakum, a) vessel of Tikal Dancer ceramic style found in Tomb 1 (excavated in Structure 15, photograph by the author), b) greenstone pectoral from the same tomb (drawing by Simon Martin, the Nakum Archaeological Project)

time consisted of 3 chambers with an unique stepped corbelled vault found in Nakum) and Structure 25 were built. The Interior Acropolis was also extended and rebuilt. At that time it had a form of a three-terraced platform which was still plain at the top.

A significant building programme was also carried out during the Late Classic period on the eastern side of Patio 1. Two constructions (Structures 14 and 15) were rebuilt and enlarged during this period. In 2006, inside of Structure 15, a royal tomb (the first known from the site) dating to the Tepeu 1 or Tepeu 1–2 transition was discovered by the Nakum Archaeological Project. It was located inside a pyramid-like construction which most probably was surmounted by a perishable temple superstructure. The tomb was furnished with more than four hundred beads from greenstone and caracol of various sizes, forming necklaces and other adornments of the deceased. One of the three vessels found inside the tomb was a lateral-flange tripod plate of the Saxche Orange Polychrome type. This vessel is painted with a representation of the dancing Maize God (Fig. 7) and it is a beautiful example of a Tikal Dancer style plate (see: Reents-Budet 1994: 339). In addition, the tomb contained greenstone earspools, four stone spind whorls and a jade pectoral from the Early Classic period covered with an incised representation of a human face on one side and a short hieroglyphic text on the other side (Fig. 7). Above the tomb, a cache consisting of two vessels and a broken greenstone tube, dating to the Late Classic period and another offering from the Terminal Classic were also found (see below). Therefore it seems that Structure 15 functioned as a temple during the Late and the Terminal Classic periods. The deposition of the offering and the cache can most probably be attributed to the cult of veneration of the king buried in the tomb which was discovered in this construction (Koszkul et al. 2007, Żrałka and Koszkul 2007, Żrałka et al. 2006).

One of the largest and highest Nakum pyramids is Structure U, located in the Southeast Plaza, east of the South Acropolis platform. Excavations carried out in 2004 by the

Triangulo Project in this pyramid indicate that it was constructed in the second half of the Late Classic period (Tepeu 2). It consisted of a seven-terraced pyramid platform topped by a temple with a single chamber. Dating of this structure to Tepeu 2 phase is further confirmed by a carved monument (Stela U) which was erected in front of the pyramid. Stela U bears the representation of a local ruler carrying a scepter in his right hand. The upper left corner of the stela was covered with an inscription that included a date read by Morley as: 9.17.0.0.0, 13 Ahau 18 Cumhu (AD 771) (Morley 1937–38: vol. 2: 12–13; see also Grube 2000).

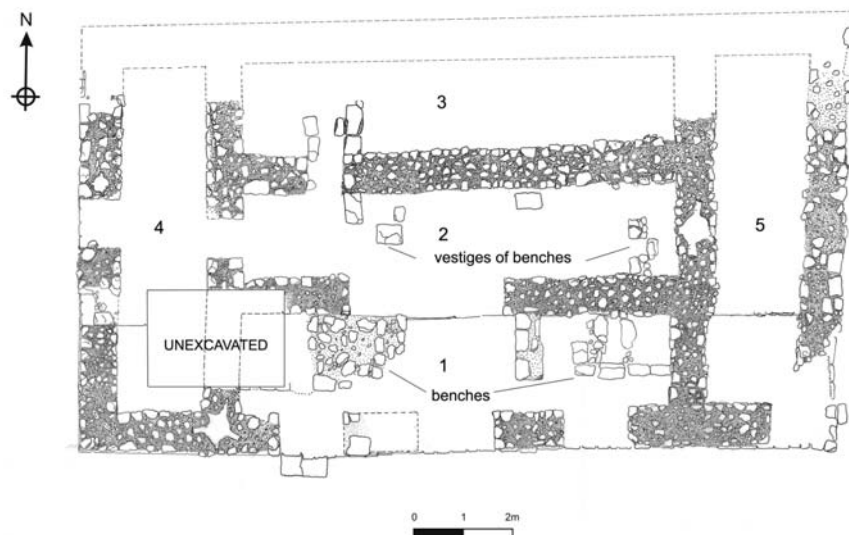
In contrast to most other Maya centres, Nakum experienced its greatest era of development during the Terminal Classic period. Evidence of Nakum's architectural and cultural peak during this period is seen not only in the central part of the site but also at its peripheries which were investigated by the author and Justyna Olko (Warsaw University) in 2001 and 2003. The prosperity of Nakum faded around AD 900/950. Archaeological vestiges of the following Early Postclassic are very scarce and limited almost exclusively to the area of the South Acropolis.

5. Analysis of Terminal Classic occupation at the site

5.1 Terminal Classic architecture

North Acropolis

The North Acropolis is the largest complex of the North Sector of Nakum. It is located at the northern end of the North Plaza and consists of a huge platform which supports a fourteen-chambered palace (Structure W – the second longest structure at Nakum), a high platform almost plain at the top (Structure 99) and at least two small mounds (Structures 98 and 100). During excavations of the Triangulo Project, only two test-pits were excavated in the courtyard surrounded by the above-mentioned structures. Archaeological material which was recovered from the level above the first floor came from the Late Classic period. Under the floor, up to the level of the bedrock, all layers were dated to the Late Preclassic (Hermes et al. 1999: 22). No traces of Terminal Classic occupation were discovered during this research. However, during investigations carried out in the North Acropolis by the Polish project in 2006, numerous vestiges of Terminal Classic occupation were found. Three test pits excavated in the courtyard of this complex yielded Terminal Classic material in the uppermost layers. Several floors dating to this period were also discovered in front of Structure 99. The latter construction was subjected to thorough investigation. It consists of a large platform ca. 8 m high and 42.5 m (E-W) x 39 m (N-S) at the base. At the top of this platform a superstructure dating to the Terminal Classic period was discovered. It consists of five rooms (three main interconnected rooms [nos. 1–3] located on the same axis, one behind the other and two additional rooms [nos. 4 and 5] located on both sides of the superstructure). The whole construction measured ca. 16 m (E-W) by 9.20 m (N-S). Rooms 1 and 2 had low benches in their interior. The main access to the superstructure was located at its southern side which



8. Nakum. Plan of superstructure discovered at the top of Structure 99 platform (drawing by Paweł Kurzawa, the Nakum Archaeological Project)

had three doorways (Figs. 8 and 75). The lower parts of the walls of this superstructure were constructed from small and medium size stones. Its upper part and roof were made from perishable materials. Construction discovered at the top of Structure 99 platform is very similar in its form and shape to some of the buildings located at the top of the Interior Acropolis (Structures 63 and 65) which were also built during the Terminal Classic period. The latter buildings most probably functioned as the living and working quarters for the attendants of the ruler and his family who resided at the adjoining Palace Y.

The floor in the northern and northwestern part of the superstructure located at the summit of Structure 99 platform was covered by many broken vessels, axes (fragments and complete artefacts), fragments of *manos* and figurines. It is possible that these artefacts were part of a termination ritual which took place during the Terminal Classic period, some time before this structure was abandoned. On the other hand, it may also be a midden left by the last inhabitants of Nakum. Moreover, in the eastern side of Room 2, human bones lying on the floor were found. Most probably they belong to some individual who was left unburied or only partly covered by soil in the room, a feature sometimes found in several Maya sites in the Terminal Classic context (see Valdes and Fahsen 2004: 153).

Tentative investigations in the area of the southern facade of Structure 99 platform indicate that its final version consisted of three terraces and that it is also dated to the Terminal Classic period. The results of investigations of the Nakum Archaeological Project are extremely important because prior to 2006 it was believed (Hermes 2002) that the North Acropolis and other parts of the North Sector might have been abandoned during the Terminal Classic period.

North Plaza

The North Plaza encompasses a vast area surrounded by different structures and complexes (North Acropolis from the north, Temple X from the east, the Merwin Group from the southeast and the Group E from the southwest). The North Plaza was one of the few areas in Nakum where public ceremonies took place. The Triangulo Project excavated several test pits in the plaza area. Potsherds associated with the superior floor of the plaza come from the Late Classic and some of them from the Terminal Classic. The fill of the plaza constitutes material from the Middle and Late Preclassic. In the excavation pit associated with Structure 96 (Suboperation 70) three floors dating to the Late or Terminal Classic were identified but were not detected in other test pits located close by (Hermes et al. 1999: 22). Thus material recovered from Suboperation 70 indicates that the North Plaza might have been paved during the Terminal Classic period.

In 2006 the Nakum Archaeological Project investigated Structure 96, a low platform located in the centre of the North Plaza. Extensive excavation units were opened at the top of this structure along with one test pit which reached the bedrock level. During this research no vestiges of a superstructure were discovered at the top of Structure 96 platform. It seems that Structure 96 was plain at the top or that it was topped by a superstructure made of perishable materials that did not survive. However at a depth of 18–19 cm below the surface, vestiges of the floor were detected. The layer below the floor as well as the construction fill of Structure 96 contained materials from various periods including Terminal Classic sherds, indicating that it was constructed during the Tepeu 3 times. However, this construction covered an earlier low platform below which layers with Middle Preclassic ceramics were found. The exploration of the western facade of this construction indicate that Structure 96 consisted of a three or four-terraced platform which was rebuilt once during the Terminal Classic. This remodelling included covering of the lower terrace of the platform with a new wall. Most probably, other facades of Structure 96 platform underwent the same architectural change.

In sum, the investigations of the Nakum Archaeological Project indicate that Structure 96 was constructed during the Terminal Classic and that it underwent at least one phase of remodelling during that span time.

Merwin Group and Group E

The Merwin Group is located at the south-eastern corner of the North Plaza, close to the northern end of Perigny Causeway. It consists of a big rectangular platform which is surmounted by a group of 14 structures.

Excavations from the 2000 season resulted in distinguishing four construction stages for that complex: the first two dating to the Late Preclassic, the third to the Late Classic and the last to the Terminal Classic. In the Late Classic, the complex was 40 m long, 25 m wide and 3 m high. It consisted of a two-terraced platform. A stairway leading to the summit of that complex was located at its western facade. Yet another access to the Merwin Group might have been located at the eastern facade. During that stage, the Merwin Group was topped by 14 structures (Nos. 114-126) which probably served as residences.

Vestiges of the Terminal Classic occupation in that complex relating to the 4-th construction stage are very scarce. They are confirmed by the Terminal Classic paving detected on the surface level on top of the platform of the Merwin Group. At a depth of 0.50 m below this paving, the floor of the 3rd Late Classic version of the complex was discovered. Additionally, during the Terminal Classic, an offering (no. 7) consisting of one vessel (NKMC 016) was found deposited in an upturned position on the northern wall of the Merwin Group platform. The ashy matrix found at the foot of the eastern side of the platform of the Merwin Group (Suboperation 87) is probably also connected with Terminal Classic cultural activity. Excavations undertaken in Nakum, especially in the South Sector indicate that the layer of ash is connected with the last occupation phase of the site during the Terminal Classic period (Hermes and Calderón 2000: 12–14).

The Perigny Causeway (which connects the North and Central Sectors of the site and adjoins the Merwin Group from the southwest) was also rebuilt at that time. During the Terminal Classic period the surface of the causeway was paved and the causeway parapets underwent minor remodelling.

Group E is located west of the Merwin Group, in the south-western corner of the North Plaza. It consists of six structures (Nos. 87-92) built on a two-stepped terrace which was built on a larger platform of asymmetric form. All the material obtained from three test-pits excavated in the area of Group E come from the Late Classic period (Hermes et al. 1999: 23).

Ballcourt (Structures 7 and 8)

The ballcourt is located at the end of Perigny Causeway on its western side. It consists of 2 paralleled structures (Structures 7 and 8) which are between 15 and 16 meters long. A playing alley between both structures is 3.40 m wide. Excavations undertaken in the ballcourt in 1999 (Hermes et al. 1999) resulted in establishing three architectural stages for that complex: the first dated to the Late Classic, the second and third to the Terminal Classic.

During the first architectural stage, two long structures (Structures 7 and 8) forming the ballcourt were built. Each of them consisted of vertical bench fronts and sloping plaster surfaces rising up to the first landing which joins the second sloping surface. Finally, the second sloping surfaces are connected with the second landing. The first floor of the ballcourt was constructed over a rubble of stones which were used to level the area so as to enable the construction of this complex (Hermes et al. 1999: 23–24). The two consequent Terminal Classic construction stages involved repaving the ballcourt floor twice. As a result, the height of the vertical bench fronts of the ballcourt was reduced. The ballcourt floor was probably repaved due to the deterioration of its surface as a result of rain water coming from the neighbouring causeway.

Structure A

Structure A is located on the eastern side of the Central Plaza. Investigations of Structure A included tunnelling, excavations inside the pyramid temple and of pyramid terraces. They resulted in the discovery of six architectural phases: the first four (A-1 to A-4) dated to the first part of the Late Classic (Tepeu 1); the fifth phase (A-5) during

which most of the construction was carried out, is from the second part of the Late Classic (Tepeu 2); and the last remodelling architectural stage (A-6) is dated to the Terminal Classic.

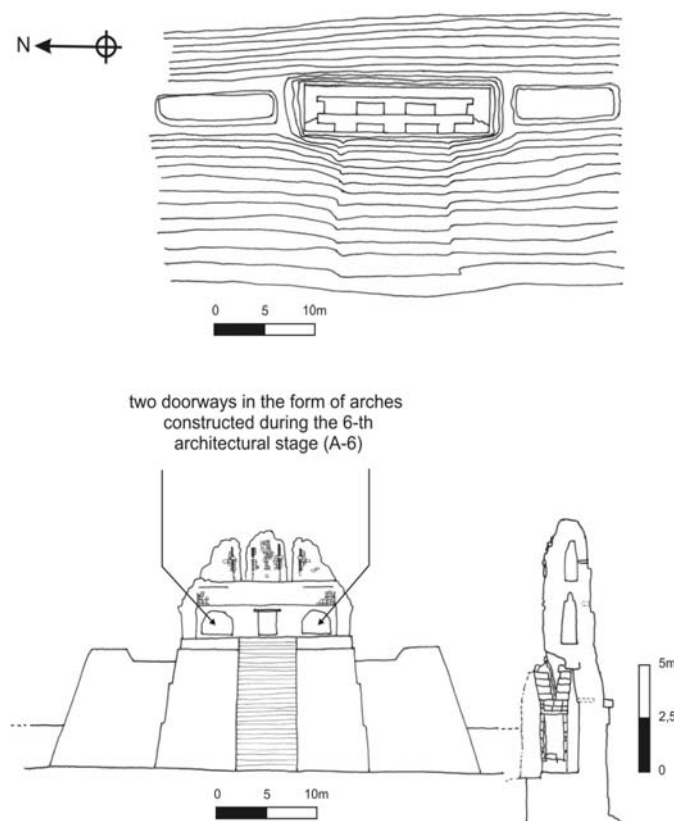
Before remodelling work was done in the Terminal Classic, the fifth stage (A-5) appeared as follows: it consisted of a big pyramid platform which on the western facade had a stairway going to the top. The platform of Structure A-5 was connected with the platforms of four adjoining structures, named 1, 2, 3 and 4. The pyramid platform of Structure A-5 had seven terraces on the west side and nine terraces on the east side. It was topped by a temple which had two narrow vaulted chambers (east and west chamber) and a beautifully embellished roof comb. Communication between the two chambers was through a rectangular doorway located in the central part of the wall separating them (Hermes and Calderón 2000: 18).

A number of changes occurred during the sixth stage (A-6) in the Terminal Classic period. Structure A was rebuilt by modifying the dimensions of the pyramid platform terraces from the earlier period (stage A-5). Excavations indicate that at least the eastern facade of Structure A-6 was not connected with the adjacent Structures 1 and 2 in stage A-6, as it had been in the case of the earlier A-5 stage. On the western facade, a stairway was kept in use but its size and inclination had been changed. In the Terminal Classic, we can also see some remodelling of the temple chambers located on the top of the pyramid. The exterior walls of the temple were covered with new masonry. During the same sixth architectural stage, two new interior doorways between the east and west chambers of the temple were also constructed (Figs 9 and 76). They were cut and sculpted in the form of arches in the north and south ends of the wall which separated both chambers (Hermes et al. 1999: 42).

Structure C

Structure C is a pyramid-like construction topped by a small temple chamber (Fig. 77). It stands 24.50 m high today and is located in the western part of the Central Plaza. It was partly investigated in the 2004 season. Investigations included excavations inside a temple chamber, outside it as well as in the opening of 2 test-pits (one in the floor of the temple chamber and another around Stela C – a carved monument that was erected in front of Structure C).

Structure C is not well preserved. However, investigations carried out in 2004 revealed that it is a pyramid platform approximately 20 m high and most probably consisting of 9 bodies or terraces. The pyramid platform is topped by a single chamber which measures 7.35 (N-S) x 1.36 (E-W). The stone vault of the chamber has collapsed but the height of the chamber from its floor to the soffit is 3.43 m. The doorway of the chamber is 2.50 m wide with jambs 1.25 m thick. Structure C has a stairway on its eastern facade. Only 10 steps located in the middle of the stairway have survived. During excavations in the interior part of the temple chamber, four holes were detected, each located in one of the four corners of the chamber. The diameter of the holes is between 0.25 and 0.30 m and their depth is between 0.12 and 0.29 m. They might have served as a support for roof beams after the stone vault of the chamber had collapsed. On the other hand, the shallow depth of the holes may suggest that they had a different function.



9. Nakum. Structure A, (redrawn by K. Radnicka after Quintana and Wurster 2001: fig. 145 and Quintana and Wurster 2002: fig. 24)

Traces of burning discovered on the floor of the temple chamber and close to the holes may indicate another, possibly ritual function (Calderón et al. 2004: 107–108).

A small test pit excavated in the temple floor of Structure C to the depth of 4 m provided Terminal Classic materials from the construction fill. At a depth of 2.33 m below the floor of the temple chamber, another floor (Floor 2) was discovered. This is a levelling floor made during the construction process of the pyramid platform. No substructure was discovered although such a construction may exist in the lower part of Structure C. In sum, the excavations indicate that Structure C was constructed during the Terminal Classic period. Materials recovered in the vicinity of Stela C were from the Late Preclassic and Terminal Classic periods (Calderón et al. 2004). This monument partly cut the floor of the Central Plaza and was set on a layer of a well-adhered compact mixture of stones and lime. The erection of this monument on the uppermost floor of the Central Plaza in front of Structure C which is dated to the Terminal Classic period may indicate that both Stela C (which has the date AD 815 inscribed on it) and Structure C are contemporaneous.

Structures 12–12A

Structure 12 is located in the south-western corner of the Central Plaza, south of Structure C. Before the 2004, it was believed that the mound referred to as Structure 12 contained only one architectural construction. However, during limited investigations carried out in 2004 in the area of the mound, the existence of two different structures (12 and 12A) was revealed (Calderón et al. 2004). Excavations showed that both structures date to the Terminal Classic period. It was also possible to determine that Structure 12A is stratigraphically earlier than Structure 12.

Limited excavations revealed that Structure 12A was a palace-like construction which consisted of 3 rooms roofed by perishable materials (Fig. 10). The walls of Structure 12A survived to the height of 0.70 m (above the floor). Three doorways of this construction were detected (each one leading to one of the three rooms of Structure 12A). The northern doorway is 1.42 m wide and the central one is 1.37 m wide. The southern doorway is approximately 1 m wide but it was narrowed by a wall that most probably was constructed during the termination ritual which included the deposition of Offering 31 and the sealing of Structure 12A.

Sometime during the Terminal Classic period, Structure 12A was sealed and blocked. First an offering (no. 31) was deposited on the floor (Floor 2 detected in Suboperation 10 [Calderón et al. 2004: 101–102]) in the area of the southern doorway of Structure 12A. The offering covered an area 1x0.85 m and it consisted of a concentration of flint and obsidian flakes and artefacts as well as some sherds. The layer in which Offering 31 was discovered was 0.10 m thick. Moreover, the floor where Offering 31 was discovered showed traces of burning. Subsequently, the walls of Structure 12A were covered by a layer of stuccoed floor (Floor 1 detected in Suboperation 10).

It is assumed that after Structure 12A was sealed, a new construction (Structure 12) was built to the east of it. Structure 12 blocked the doorways of Structure 12A. Investigations in the area of Structure 12 in 2004 included excavations along its facade, the opening of a few test-pits in the vicinity of Structure 12 as well as excavations in looters' trenches that were dug into this structure. These investigations revealed that Structure 12 has a round shape (Calderón et al. 2004: 94–103). This is the only example of this type of construction at Nakum. It is closely analogous to the round structures in Chichen Itza, Nohmul and Seibal (dated to the Terminal Classic period). The diameter of Structure 12 is approximately 16 m (Fig. 10). At the northern side there was a small bench or ramp jutting out 1.80 m to the north of the round platform. It is 0.45 m high and it might have functioned as an access to the summit of the round platform. Unfortunately, in the 2004 archaeological season the upper part of Structure 12 was not excavated (Calderón et al. 2004). Thus we do not know what kind of superstructure existed on the summit of the round platform of Structure 12.

Structure 53

Structure 53 is located in the south-western part of the Central Plaza, approximately 4 m north of the South Acropolis platform (Fig. 5). Excavations carried out in 2004 revealed two architectural stages for Structure 53, both dating to the Terminal Classic period. During the first architectural stage a low rectangular platform measuring 20 m

(E-W) x 6 m (N-S) was built on the last floor of the Central Plaza. The platform was not very well preserved but its exterior walls, which were uncovered during excavations, were between 0.50 and 0.60 m high. Along the northern facade of Structure 53 a small terrace or bench which measures 2 m (N-S) x 10 (E-W) was discovered. It was heavily destroyed; however, it is assumed that it enabled access to the summit of the platform. Excavations on the surface of Structure 53 did not show any traces of a superstructure. The only items found were large stones of the construction fill mixed with loosed soil on the surface of the platform.

During the second architectural stage a small terrace measuring 1.50 (N-S) x 2 (E-W) was added to the southern wall of Structure 53. The terrace is located 5 m west of the south-eastern corner of the platform and 10.60 m east of the south-western corner of the same platform. The terrace was very heavily destroyed when it was discovered but it is assumed that it had two steps and it served as a second access route to the summit of the platform.

During excavations, a large amount of artefacts was discovered in the vicinity of Structure 53. These artefacts include musical instruments made from ceramics, bone adornments, two offerings (nos. 27 and 29) and figurine fragments made of ceramics and stone. Other items found included projectile points, knives, axes, *manos*, *metates*, mortars and polishing stones. The location of Structure 53 in the area of the Central Plaza – a sacred precinct of Nakum – as well as the discovery of the above mentioned artefacts may indicate that Platform 53 had a ritual function (Calderón et al. 2004: 75–83).

Structure 52

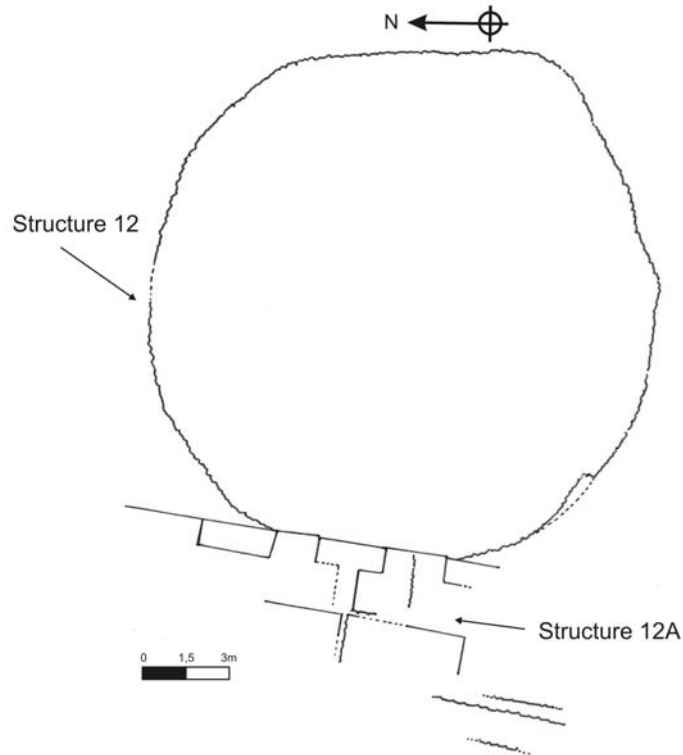
Structure 52 is located in the south-eastern part of the Central Plaza (Fig. 5). Excavations of Structure 52 in 2004 revealed that it was constructed during a single architectural stage in the Terminal Classic period. Structure 52 (which is similar to the neighbouring Structure 53) is a low platform which was constructed 4 m north of the platform of the South Acropolis. Structure 52 was discovered in a very bad state of preservation, however it was possible to determine its approximate dimensions. It is 22 m long, 6 m wide and 0.40 m high (Calderón et al. 2004: 85–92).

Between the southern wall of Structure 52 and the eastern part of the eastern stairway of the South Acropolis platform, a Terminal Classic midden (Midden 4) was discovered. The midden contained an ashy matrix with many artefacts including sherds, fragments of figurines, musical instruments, bones, axes, fragments of grinding stones, obsidian blades, flint flakes and fauna remains (most probably of big mammals) (Calderón et al. 2004: 92).

It is assumed that Structure 52 also had a ceremonial function. It was located along with Structure 53 at the entrance to the South Acropolis, flanking the main access to that complex from the sacred precinct of the Central Acropolis.

Structure V

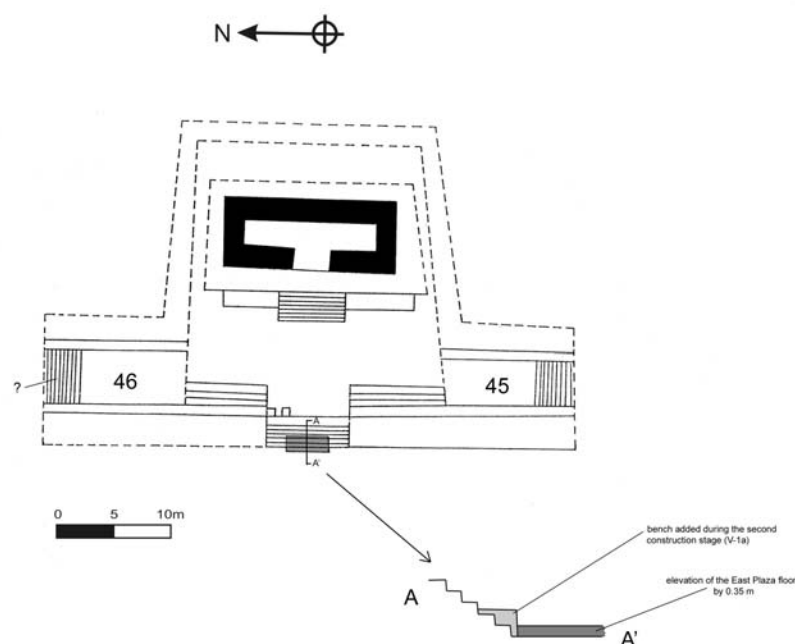
Structure V is located at the eastern end of the East Plaza (Fig. 78). During excavations, two architectural stages (V-1 and V-1a), both dating to the Terminal Classic period were distinguished. However, Bernard Hermes noticed that it is very possible that an



10. Nakum. Plan of Structures 12 and 12A (redrawn by K. Radnicka after Calderón et al. 2004: fig. 150, Proyecto Triángulo, IDAEH)

earlier Late Classic version of Structure V might have existed but has not been detected during excavations due to the advanced state of decay of this building (Hermes et al. 2001: 16).

During the first construction stage (V-1), Structure V consisted of a basal platform which supported a smaller platform topped by a chamber. The basal platform was made up of three terraces and had a stairway consisting of 5 steps on its western facade. This platform was connected from the north and south sides with two small additional platforms (called Structures 45 and 46). The southern platform (Str. 45) had a stairway that led to the top of the basal platform. The same stairway might have existed in the case of the northern platform (Str. 46); however it was not detected during excavations due to the bad state of preservation of Structure V (Fig. 11). On the basal platform, there was a smaller platform topped by a chamber which measured 10.50 (N-S) x 2 (E-W). The chamber was most probably accessible by a stairway leading from the basal platform, but such a stairway was not found.

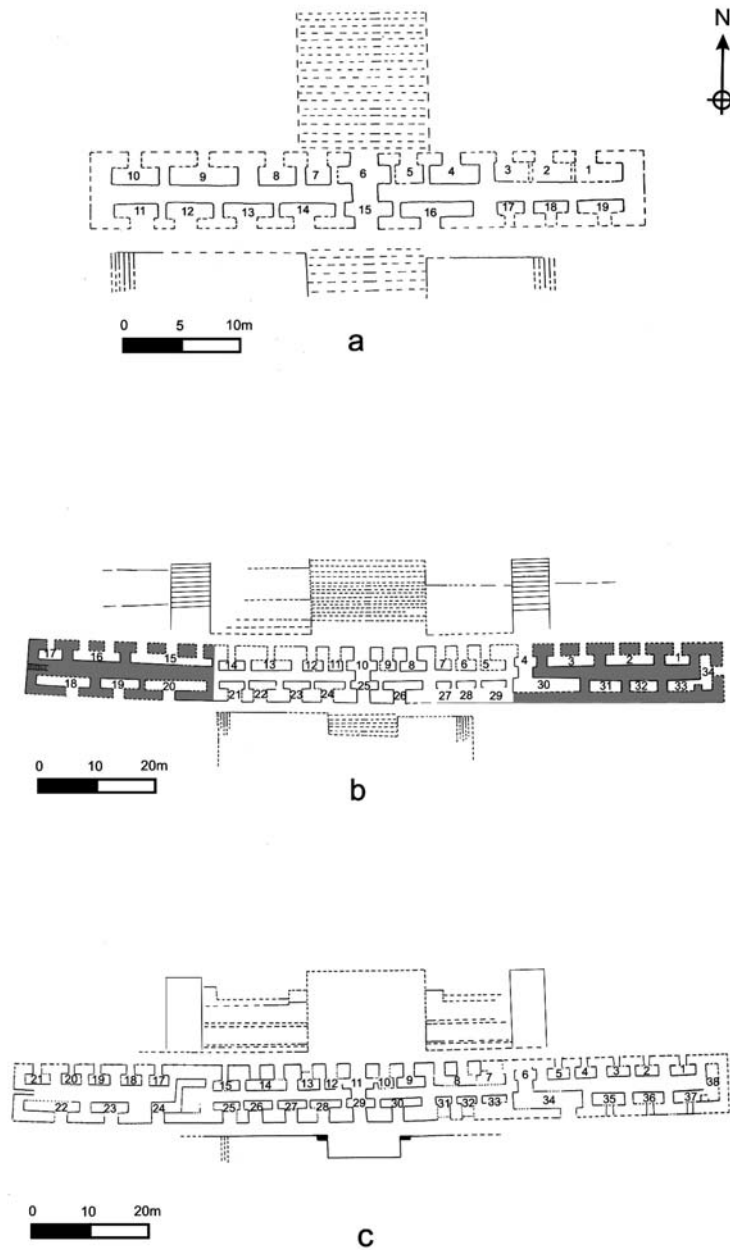


11. Nakum. Plan of Structure V including remodelling of the second architectural stage (V-1a) (re-drawn by the author after Hermes et al. 2001: fig. 9)

During the second architectural stage (V-1a), we can only see minor remodelling. The stairway that led to the basal platform from the level of the East Plaza was modified by the construction of a bench or a stairway block. This block was 1.40 m wide and 0.30 m high and it covered two lower steps and a part of the third step of the stairway. Not long after, the level of the East Plaza was elevated by 0.35 m. During the same architectural stage the level of the basal platform was also elevated by 0.75 m by the construction of Floor no.1 (Hermes et al. 2001: 16) (Fig. 11).

Structure D

Structure D borders the South Acropolis from the northern side and is one of the longest palace-like structures in the Maya Lowlands (Fig. 80). Investigations carried out in the area of Structure D included excavations of several chambers, extensive tunnelling of Structure D (mainly of its southern facade) as well as excavations along its facades. Construction activity of that building can be divided into 11 architectural stages: the first five, (D Sub-1, D Sub-2, D Sub-3, D Sub-3a, D Sub-4) dating to the Late Preclassic period; the next two (D Sub-5, D Sub-6) to the Early Classic period; the eighth (D-1) and ninth (D-1a) stages are from the Late Classic period; and finally, the tenth (D-2) and eleventh (D-2a) architectural stages can be dated to the Terminal Classic period (Hermes et al. 2001, Calderón and Toraya 2002).



12. Nakum. Structure D; a) stage D-1, Late Classic; b) stage D-2, Terminal Classic (chambers added during this architectural stage are marked in grey); c) stage D-2a, Terminal Classic (two masonry blocks added on both sides of the southern stairway are marked in grey), redrawn by the author after Hermes et al. 2001: figs 71, 72, 73, Proyecto Triángulo, IDAEH)

In the ninth construction stage (D-1a), Structure D had 19 chambers and measured 47 m (E-W) x 6.5 m (N-S). Chambers no. 1–10 were located in the northern facade and chambers no. 11–19 on the southern facade of the building (Fig. 12a). The exact dimensions of the chambers during this architectural stage are given in Table 2.

The building could be reached by two stairways, one going from the area of Patio 1 and another from the area of the Central Plaza. Two chambers located in the central part of the building (Chambers no. 6 and 15) were interconnected such that one could reach Patio 1 from the Central Plaza ascending the northern stairway and passing through these two chambers to the stairway which led from Structure D to the area of Patio 1.

Table 2. Ninth construction stage of Structure D-1a, Late Classic
Dimensions of the chambers (in metres)

Chamber number	Length	Width	Surface in m ²
1	3.40	1.70	5.78
2	3.40	1.70	5.78
3	2.80	1.70	4.76
4	2.80	1.80	5.04
5	2.80	1.80	5.04
6	5.20	1.80	9.36
7	2.40	1.80	4.32
8	3.70	1.80	6.66
9	6.80	1.60	10.88
10	4.45	1.60	7.12
11	4.15	1.35	5.60
12	4.70	1.45	6.81
13	5.00	1.15	5.75
14	5.35	1.30	6.95
15	4.75	1.35	6.41
16	6.95	1.35	9.38
17	2.65	1.20	3.18
18	3.35	1.20	4.02
19	4.40	1.20	5.28
Total:			118.12 m²

In the tenth construction stage (D-2) dated to the Terminal Classic, Structure D was lengthened to the east and west. The northern and southern facade of the previous building – D-1a was also covered with new masonry. The new Structure D-2, measured 117.6 m (E-W) x 12 m (N-S) and had 34 chambers.

In the eastern part of Structure D, nine new chambers were added (nos. 1–4 and 30–34); four on the southern facade, four on the northern facade and one at the eastern end of the building (Fig. 12b and Table 3). As a result of this rebuilding programme, Structure D was enlarged by 35 m in the eastern direction. In the western part, six new chambers (nos. 15–20) were added, three at the northern and three at the southern facade (Table 3). Thus the building was also widened by 31 m to the west. Stones used in the construction

of the walls of all the new chambers were well worked and covered with a thin stucco layer. Chambers nos. 5 to 14 and 21 to 29 belong to the previous Structure, D-1a. On the western end of the building, there was a narrow stairway 0.70 m wide leading to the roof of the building (Hermes et al. 2001, Calderón and Toraya 2002).

The main stairway on the northern facade of Structure D was widened to approximately 20 m. Two new lateral stairways were also added to either side of it (Fig. 12b). A new version of a stairway leading to Structure D from area of Patio 1 was also constructed. Access to all the chambers of Structure D was possible due to a platform on

Table 3. Tenth construction stage of Structure D-2, Terminal Classic
Dimensions of the chambers (in metres)

Chamber number	Length	Width	Surface in m ²
1	4.25	1.75	7.43
2	8.20	1.80	14.74
3	8.20	1.85	15.17
4	3.80	1.75	6.65
5	3.40	1.70	5.78
6	3.40	1.70	5.78
7	2.80	1.70	4.76
8	2.80	1.80	5.04
9	2.80	1.80	5.04
10	5.20	1.80	9.36
11	2.40	1.80	4.32
12	3.70	1.80	6.66
13	6.80	1.60	10.88
14	4.45	1.60	7.12
15	14.40	1.40	20.16
16	8.00	1.60	12.8
17	4.20	1.70	7.14
18	9.45	1.65	15.59
19	6.25	1.65	10.31
20	10.60	1.80	19.08
21	4.15	1.35	5.60
22	4.70	1.45	6.81
23	5.00	1.15	5.75
24	5.35	1.30	6.95
25	4.75	1.35	6.41
26	6.95	1.35	9.38
27	2.65	1.20	3.18
28	3.35	1.20	4.02
29	4.40	1.20	5.28
30	11.85	2.05	24.29
31	5.45	2.05	11.17
32	4.90	1.90	9.31
33	4.55	1.95	8.87
34	6.00	1.90	11.40
Total:			312.23 m²

Table 4. Eleventh construction stage of Structure D-2a, Terminal Classic
Dimension of the chambers (in metres)

Chamber number	Length	Width	Surface in m ²
1	4.25	1.75	7.43
2	3.75	1.80	6.75
3	3.75	1.80	6.75
4	3.70	1.85	6.84
5	3.65	1.85	6.75
6	3.80	1.75	6.65
7	3.40	1.70	5.78
8	6.20	1.70	10.54
9	4.70	1.75	8.22
10	2.80	1.70	4.76
11	5.20	1.70	8.84
12	2.40	1.70	4.08
13	3.70	1.80	6.66
14	6.80	1.80	12.24
15	4.45	1.60	7.12
16	4.70	1.40	6.58
17	3.25	1.80	5.85
18	3.55	1.80	6.39
19	3.56	1.75	6.23
20	3.35	1.75	5.86
21	4.20	1.70	7.14
22	9.45	1.65	15.59
23	6.25	1.65	10.31
24	5.00	1.80	9
25	4.15	1.35	5.60
26	4.70	1.45	6.81
27	5.00	1.35	6.75
28	5.35	1.30	6.95
29	4.75	1.45	6.88
30	6.95	1.40	9.73
31	2.65	1.25	3.31
32	3.25	1.15	3.73
33	4.40	1.20	5.28
34	11.85	2.05	24.29
35	5.45	2.05	11.17
36	4.90	1.90	9.31
37	4.55	1.95	8.87
38	6.25	1.90	11.87
Total:			302.91 m²

which they were located. The platform formed a narrow 1.50 m wide space in front of the northern and southern row of the chambers. On the northern facade, the platform of Structure D and the space which enabled communication between each chamber constituted the uppermost *talud* of the South Acropolis.

In the eleventh construction stage (D-2a), remodelling is seen only in chambers nos. 2, 3, 15, 16 and 20 of the previous Structure D-2. In the above mentioned chambers, transverse walls are constructed to enlarge the number of chambers to 38 (Fig. 12c and Table 4). In Chamber no. 2, a transverse wall 0.90 m wide was constructed; it separates and forms two new chambers: nos. 2 and 3 of Structure D-2a. In Chamber no. 3 of Structure D-2, a transverse wall 0.90 m wide was constructed forming two new chambers: nos. 4 and 5 of Structure D-2a. In chamber no. 15 of Structure D-2, two transverse walls 1.20 m wide are constructed forming Chambers nos. 17, 18 and 19 of Structure D-2a. Chamber 20 of D-2 stage was reduced from 10.60 to 5 m in length, forming a new Chamber, no. 24. At the western and eastern side of this chamber two transverse walls were constructed and a space of 2.80 m on both its sides was filled and sealed. At the northern wall of the new Chamber no. 24, a narrow corridor which was 1 m wide was constructed and communicates with Chamber no. 16 located on the northern facade of the building.

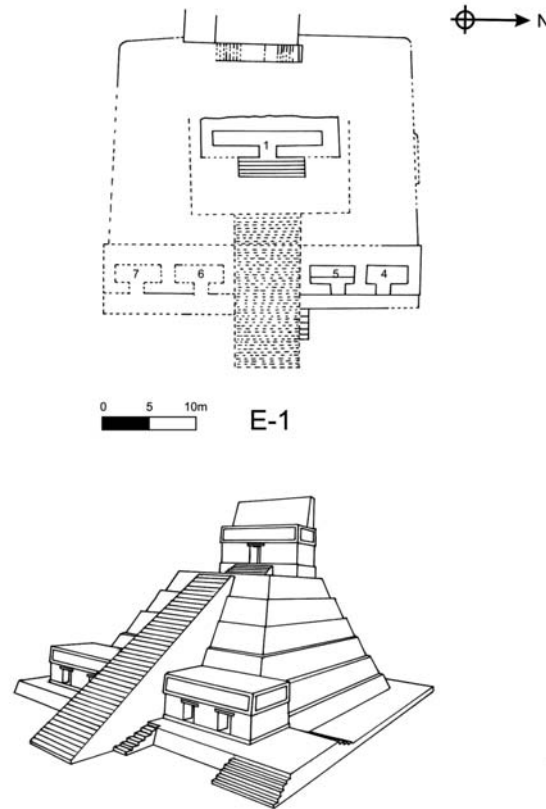
During stage D-2a, stairways from the previous Structure D-2 were still used. However, on both sides of the southern stairway, at the place where they connect with the platform of Structure D, two small masonry blocks nearly 1.90 m high were constructed (Fig. 12c) (Hermes et al. 2001; Calderón and Toraya 2002).

Structure E

Structure E is located on the west side of Patio 1 (Figs 79 and 81); it adjoins Structure F from the west side and Structure H from the south side. The excavations indicate the presence of ten architectural stages for that structure. Although some scarce vestiges of Late Preclassic occupation exist, the first substantial construction stages of that structure are dated to the Early Classic period (E Sub-1, E Sub-2). The next four construction stages (E Sub-3, E Sub-4, E Sub-5 and E Sub-5a) are from the first part of the Late Classic (Tepeu 1). The seventh stage (E-1) dates to the Tepeu 2 phase and the construction of the last three phases (E-2, E-2a and E-2b) coincides with the Terminal Classic period (Hermes et al. 2001).

It is necessary to provide some information about how the building looked like in the seventh construction phase (E-1) before we focus on the Terminal Classic activity of Structure E. At the end of the Late Classic period, Structure E consisted of a great quadrangular pyramid platform that measured 31.80 (N-S) x 29.40 (E-W) at its base. The platform probably consisted of seven terraces and was topped by a building called Chamber 1, which was constructed on the N-S axis (Fig. 13). Chamber 1 measured 15 (N-S) x 4.65 m (E-W). The stairway leading to the summit of the pyramid platform was located on the west facade and was 8.35 m wide. At the base of the pyramid, chambers nos. 4, 5, 6 and 7 constructed on a small platform during the 5-th construction stage (E Sub-5) and dating to the first part of the Late Classic period were still in use.

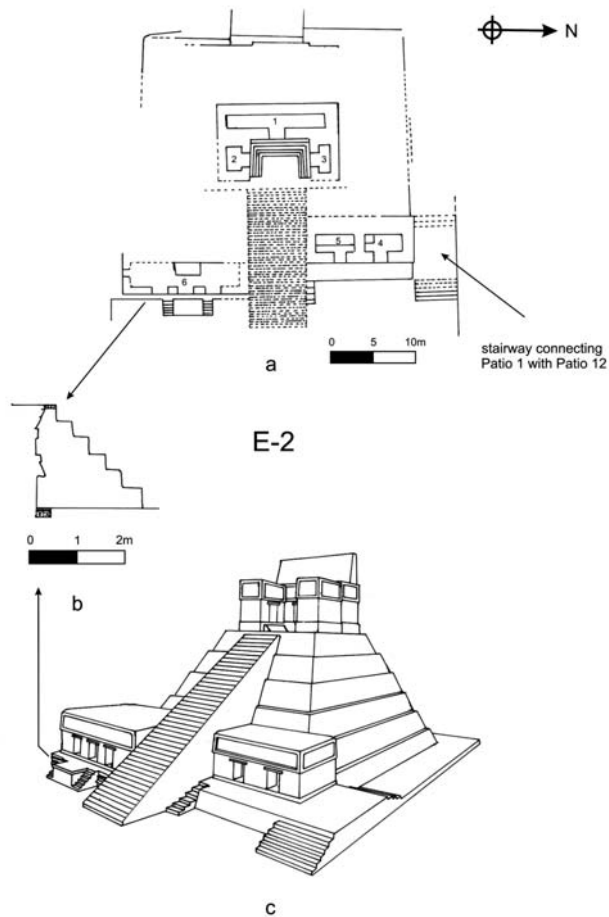
During the eighth construction stage (E-2) dated to the Terminal Classic, the platform on which Chambers 4 and 5 stood was widened by 0.85 m in the eastern direction. The stairway leading to the summit of Structure E was still in use during that stage. The platform on which Chambers 6 and 7 were constructed (in the south-eastern corner of Structure E) was also widened to the east as a result of the construction of a new chamber (Chamber no. 6 of the new 8-th construction stage). As a result, Chambers nos. 6 and 7



13. Nakum. Structure E, plan and reconstruction during stage E-1, Late Classic period (redrawn by K. Radnicka after Hermes et al. 2001: figs 22 and 23, Proyecto Triángulo, IDAEH)

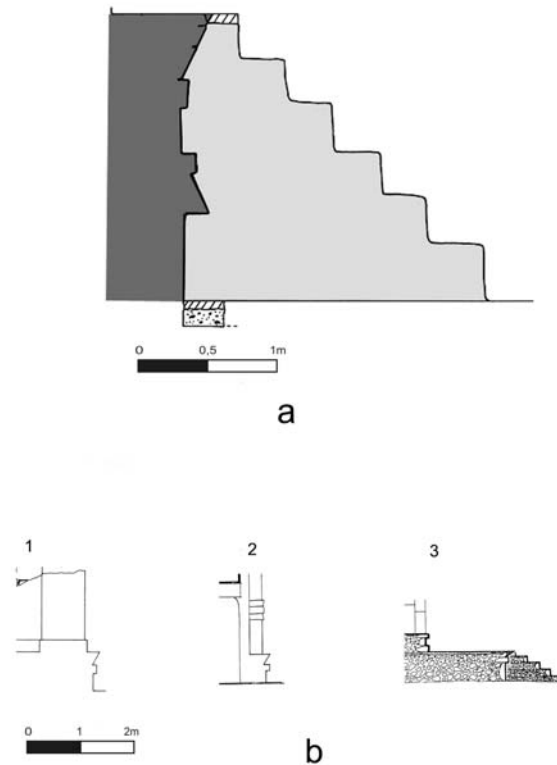
from the sixth construction stage (E Sub-5a) were closed and their frontal wall (or facade) was transformed into the rear wall of Chamber 6. This new chamber measured 15 m (N-S) x 3.8 m (E-W) and had three doorways on the eastern facade and one doorway on the southern facade (Fig. 14). The doorways on the eastern facade of Chamber no. 6 measured (going from the north), respectively, thus: first doorway – opening 1.40 m wide, jamb 0.85 m thick; second doorway – opening 1.95 m wide, jamb 0.85 m thick; third doorway – opening 1.45 m wide, jamb 0.90 m thick. The access at the south facade had an opening 0.95 m wide and jamb 0.90 m thick. Inside Chamber 6, on the same axis as the central doorway, a bench was constructed beside the western wall of that room. The bench measured 3.20 (N-S) x 1.45 (E-W) m, its height was 0.50 m.

Chamber 6 is located on a platform which encloses Patio 1 from the west. This platform has a distinct profile. It consists of a vertical wall (0.60 m high) surmounted by a sloping lower member or *talud* (height: 0.28 m; inclination: 21°) and a vertical middle panel or *tablero* (0.70 m high) above it. It also has an outward-sloping upper member or re-



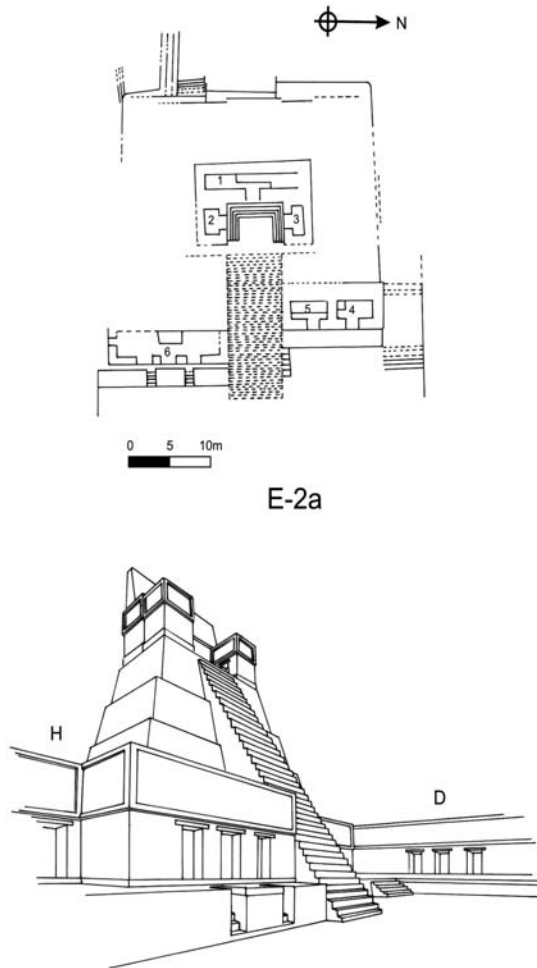
14. Nakum. Plan and reconstruction of Structure E during stage E-2, Terminal Classic period. Drawing includes profile of the south-western part of Patio 1 (where Chamber 6 stands), which has a *talud-tablero*-reverse *talud* motif (redrawn by K. Radnicka after Hermes et al. 2001: figs 24 and 25, Proyecto Triángulo, IDAEH)

verse *talud* (0.46 m high) (Figs 14b and 15a). This architectural element is unique in Nakum but especially typical for Epiclassic sites of Central Mexico (Xochicalco) or the Gulf Coast (El Tajín). It also appears at Tikal and Yaxha during the Late Classic period. Access to Chamber no. 6 from the area of Patio 1 was through a stairway 5.80 m long, consisting of 5 steps. The stairway was located on the facade of a platform with a vertical wall – *talud-tablero* – reverse *talud* motif. The stairway was divided at its central part into two by a masonry block measuring 3.60 m (N-S) x 2.10 m (E-W) x 1.70 m high. At its upper part, the block had a cornice 0.45 m thick (Hermes and Calderón 2000: 52).



15. Nakum, a) profile made up of *talud-tablero-reverse talud* motif from the south-western side of Patio 1, (area of Structure E); b) profile of exterior walls of Rooms 1 and 5 made up of a vertical wall, small moulding and outward-sloping upper member or reverse *talud* (1) and examples of a similar motif from Structure A at Chacmultun (2) and Palace of the Governor at Uxmal (3) (redrawn by the author after Hermes and Calderón 2000: fig. 19; Calderón and Toraya 2002: fig. 24; Marquina 1964: Plate 225 and Kowalski 1987: figs 58 and 64)

Additionally, the eighth architectural stage of Structure E saw the construction of two new chambers (nos. 2 and 3) on the top of the pyramid platform: Chamber 2 was added to the existing Chamber 1 from the north and Chamber 3 to the south of it (Fig. 14). The exterior measurements of Chamber 3 are: 5 (E-W) x 3.60 (N-S) m and those of Chamber 2 are: 4.80 (E-W) x 3.65 (N-S) m. The central chamber (no.1) was also modified by the construction of a bench 0.80 m high which covered the greater part of the western and northern part of the room. The bench was almost completely destroyed in the 20-th century by looters. Nevertheless, Tozzer mentioned in his report that the bench had in its central part, a basin-like depression lined with stucco. He also noticed that no remains of a fire were found in this depression (Tozzer 1913: 171–172). However, the exact function and meaning of this depression is unknown. Also, in the

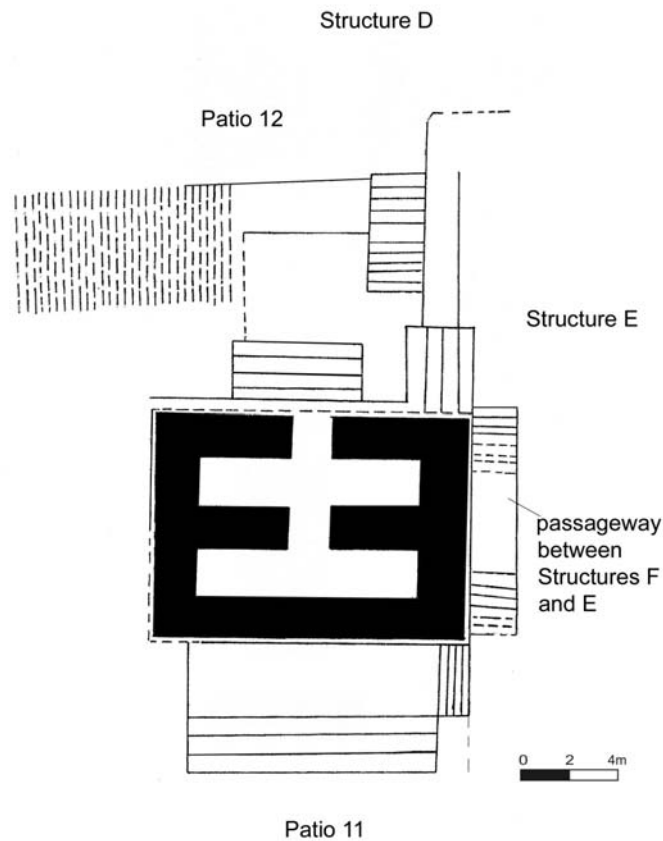


E-2a

16. Nakum. Structure E, plan and reconstruction during stage E-2a, Terminal Classic period (redrawn by K. Radnicka after Hermes et al. 2001: figs 26 and 27, Proyecto Triángulo, IDAEH)

eighth construction stage the floor level on top of the pyramid platform, where Chambers 1–3 existed, was elevated by 0.15 m.

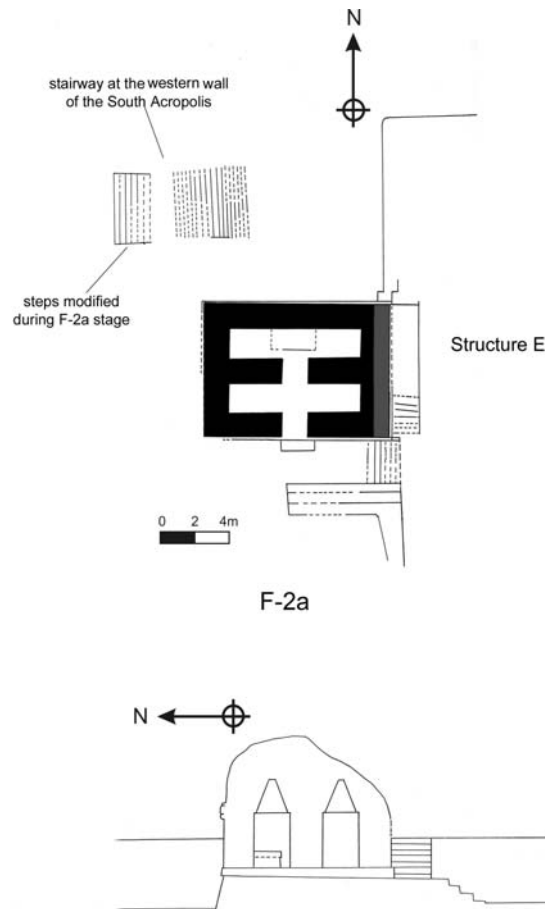
In the ninth construction stage (E-2a), we can see some insignificant remodelling work done on Structure E. The platform on which Chamber 6 stands was widened to the east by the construction of a wall which covered the previous facade consisting of a vertical wall–*talud-tablero*–reverse *talud* motif. Two narrow independent inset stairways leading to Chamber 6 were still used during this stage as was the masonry block separating the stairways. The doorway at the southern facade of Chamber 6 was filled with stones and closed (Fig. 16).



17. Nakum. Plan of Structure F, stage F-2, Late Classic (redrawn by the author after Hermes et al. 2001: fig. 11, Proyecto Triángulo, IDAEH)

At a distance of 1.24 m from the south-eastern corner of Structure E, a canal which most probably was contemporary with the ninth construction stage was discovered. We do not know the exact length of the canal but it is possible that it was constructed to drain the area of Patio 1 (Hermes et al. 2001: 30).

Finally, during the tenth construction stage (E-2b), two independent inset stairways leading to Chamber 6 were partly sealed with the construction of one larger outset stairway 7 m long and 2.20 m wide. The new outset stairway consisted of three steps and bore balustrades 0.50 m wide. It covered the three lower steps of two independent inset stairways as well as the lower part of the masonry block that separated them (Calderón et al. 2004: 7).

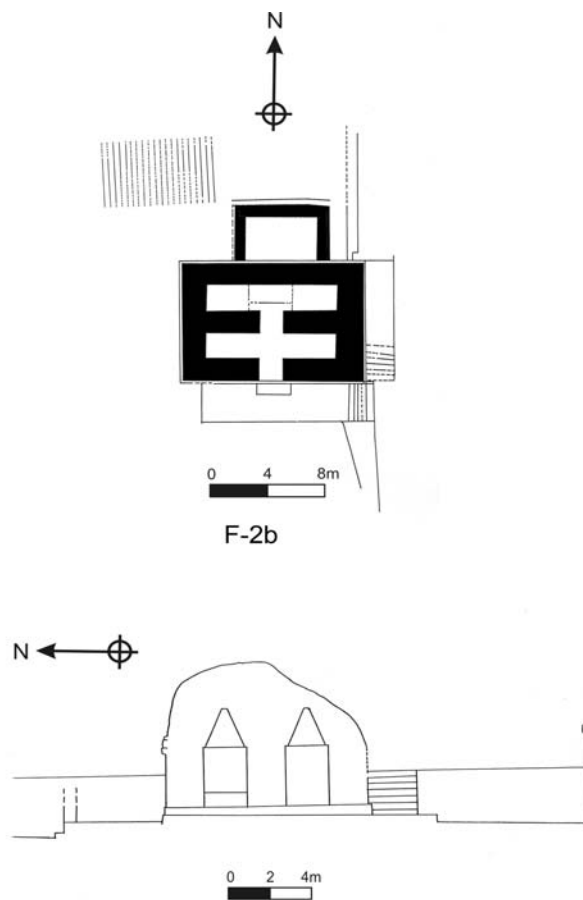


18. Nakum. Plan and profile of Structure F during F-2a stage, Terminal Classic period (redrawn by the author after Hermes et al. 1999: figs 27 and 28, Proyecto Triángulo, IDAEH)

Structure F

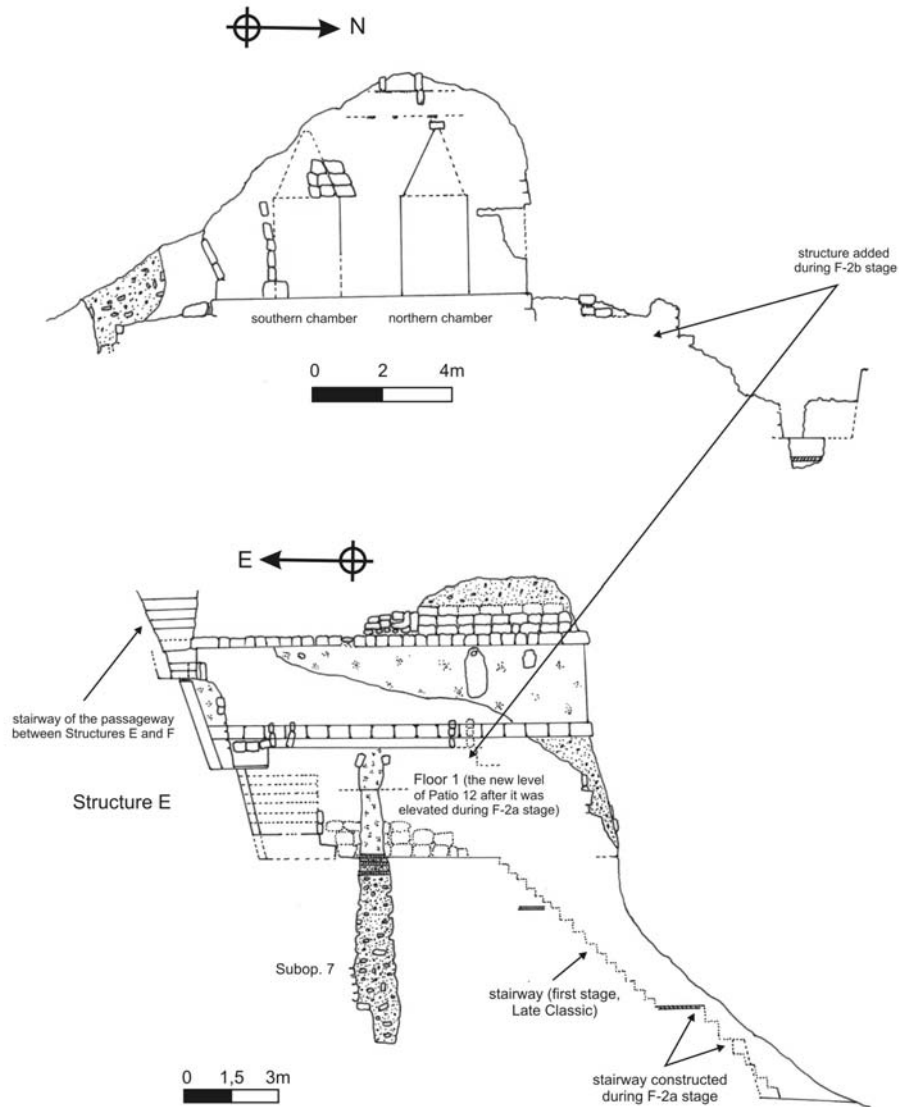
Structure F is located in the north-western part of the South Acropolis; it adjoins Structure E from the east and is bordered from the north by Patio 12 and from the south by Patio 11. During excavations, five architectural stages of that building were documented. The first two construction stages (F Sub-1, F Sub-1a) were dated to the first half of the Late Classic period (Tepeu 1), the third (F-2) comes from the second half of the Late Classic (Tepeu 2) and the last two stages (F-2a, F-2b) are dated to the Terminal Classic (Hermes et al. 2001: 18–20).

In the third construction stage (F-2), Structure F consisted of two vaulted chambers which were 14 m long, 2 m wide and 4.90 m high. Access to the building was located in the central part of the northern side (Fig. 17). The building had a rectangular plan and its exterior vertical walls were limited at the upper part by mouldings of a cornice. The area



19. Nakum. Plan and profile of Structure F during F-2b stage, Terminal Classic period (redrawn by the author after Hermes et al. 1999: figs 29 and 30, Proyecto Triángulo, IDAEH)

between the mouldings had stuccoed decorations which were detected on the north and south walls. Very similar decorations might have existed on two other exterior walls of the building. Communication between Patio 12 and 11 was by means of a small passageway between Structures E and F which was accessible by two stairways situated in the north-eastern and south-eastern corners of Structure F and the second terrace of Structure E pyramid platform. In order to reach Patio 12 from the area of Patio 11, one had to pass through the stairway stretching in front of the southern facade of Structure F, then turn right and ascend four steps that gave way to the southern stairway of the passageway. The northern stairway of the passageway was connected with steps that turned left and led to the area in front of the main access to the building. Another stairway which first went up (six steps) and then down (another four steps) connected this area with the space in front of the southern facade of Structure D (Hermes et al. 2001: 19) (Fig. 17).



20. Nakum. N-S and E-W section of Structure F (redrawn by K. Radnicka after Hermes and García 1998: figs 5 and 8, Proyecto Triángulo, IDAEH)

During the fourth construction stage (F-2a), the main doorway located in the northern facade of Structure F was sealed and contact with Patio 12 was thus closed due to this remodelling. The primary access of the building was moved to the southern facade where a new central doorway was constructed through the southern wall of the building.

The level of Patio 12 was elevated by 0.75 m by the construction of a new floor (Floor no. 1 detected in suboperations 7 and 8) (Fig. 20). Due to this remodelling, the northern stairway of the passageway linking Patios 11 and 12, along with a few steps adjoining it from the west were sealed. A stairway connecting the area in front of the northern facade of Structure F with the space in front of the southern facade of Structure D were also sealed as a result of this remodelling (Figs 18 and 20). However, the new floor (no. 1) was not connected with the north wall of Structure F and thus left a small space of 0.10 m which probably served as drainage. During the same architectural stage, the level of Patio 11 was also elevated by 0.20 m due to the construction of a new floor (Floor no. 2, Suboperation 17). Moreover, the stairway between Patio 11 and Structure F was modified; its western end was now on an axis with the western corner of the doorway of Structure F and the eastern part of the stairway was enlarged to connect it with the wall of the second terrace of Structure E platform which at that time was also rebuilt. Its orientation and curvature was changed to fit it with the new level of Patio 11 (Hermes et al. 2001: 19).

The stairway located at the western wall of the South Acropolis platform that enabled communication with Patio 12 was modified at its lower part due to the construction of new, larger steps. The stairway is not well preserved but it is possible that its upper part was also changed and it underwent remodelling due to the elevation of the level of Patio 12 (Fig. 20).

During the fifth construction stage (F-2b), in the area of Patio 12, the floor was elevated by 1 m (Floor 1, suboperation 5). On this new floor, a small structure was built and added to the northern facade of Structure F. It had a rectangular plan and access from the northern part. The walls and roof of that structure were built of perishable materials supported by a stone fundament (Figs 19 and 20).

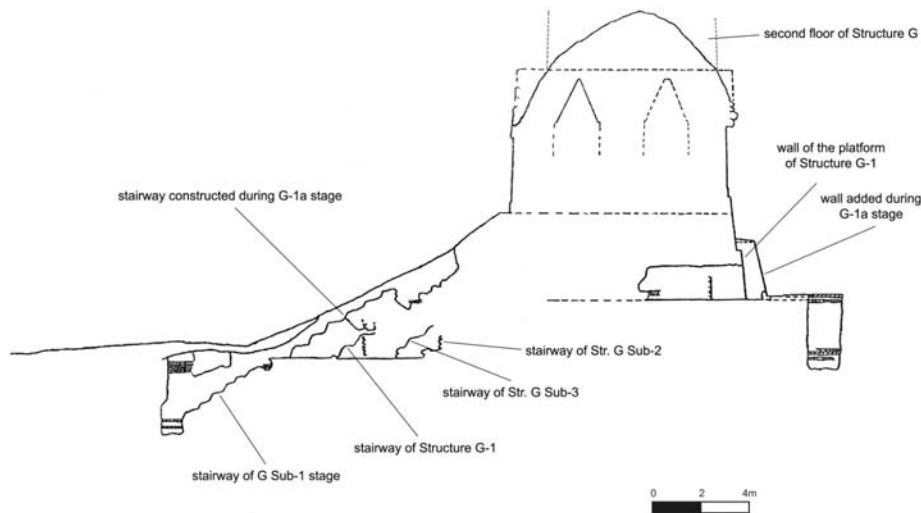
During the same architectural stage the level of Patio 11 was also elevated, covering almost completely the stairway which led to the main doorway of Structure F (Fig. 19). Communication between Patio 2 and 11 was by a three-stepped stairway that was constructed where the two patios met. The stairway partly covered the south-western corner of Structure E and the wall of Structure I. The last piece of remodelling dating to that construction stage was the elevation of the floor level of the northern chamber of Structure F to the height of its bench (Hermes et al. 2001: 20).

Structure G

Structure G is located in the centre of the South Acropolis and the southern end of Patio 1. Excavations revealed nine construction stages of that building: the first (G Sub-1) dating to the Middle Preclassic, the second (G Sub-2) to the Early Classic, the third and fourth (G Sub-3, G Sub-4) to the Late Classic period and finally the fifth to ninth (G-1, G-1a, G-1b, G-1c, G-1d) date to the Terminal Classic (Calderón et al. 2003: 30–33).

In the Late Classic (stage G Sub-3 and stage G Sub-4), Structure G was in the form of a large three-stepped platform. Excavations revealed that the northern facade of the platform was ca. 50 m long (E-W) and 1.50 m high. The stairway was located in the central part of the northern facade and might have been approximately 10 m wide.

During the fifth construction stage (G-1) dating to the Terminal Classic, a completely new building, not related in form and shape to the previous architectural stages was con-

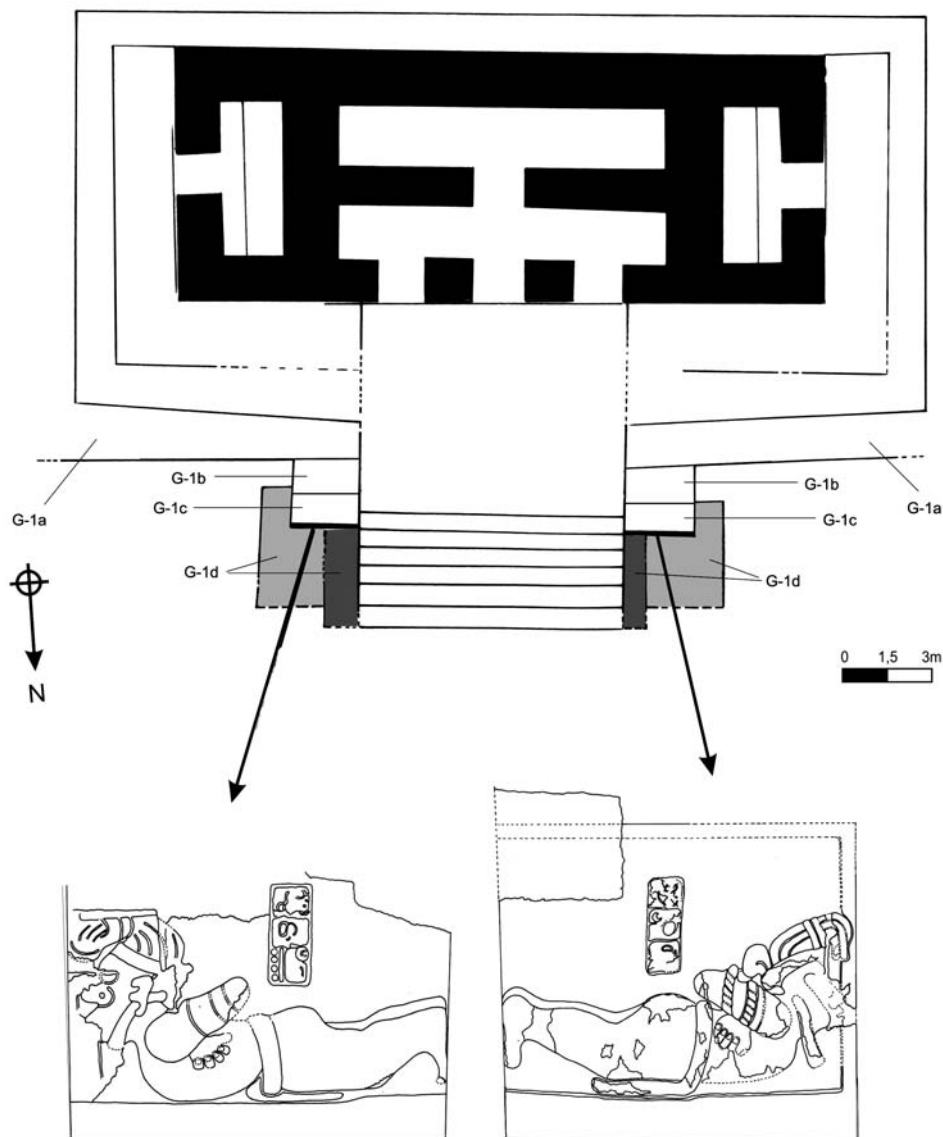


21. Section of Structure G showing various architectural stages (redrawn by the author after Hermes et al. 2001: fig. 84, Proyecto Triángulo, IDAEH)

structed (Fig. 82). The building had a rectangular plan and it measured 30 m (E-W) x 11 m (N-S). Structure G-1 consisted of a platform with a stairway on its northern side. The superstructure with eight vaulted chambers (four on the first and four on the second floor) surmounted this platform. The two main chambers on the first floor (nos. 1 and 2) were interconnected. The front room (Chamber 1) had three doorways on the northern side. Two other transversal chambers (nos. 3 and 4) were located on the eastern and western end of the superstructure (Figs. 21 and 22). Only the remains of the four chambers located on the second floor were discovered and it is known that they were much smaller than the chambers of the first floor. Alfred Tozzer (1913: 172, plate 51, 1) mentioned that the southern exterior wall of Structure G was decorated in the upper zone with a mask. Although this mask did not survive, it is possible that other similar masks decorated the exterior walls of this building during the Terminal Classic period.

The southern wall of the platform of Structure G was set up on the floor of Structure G-Sub 4 and is located 1.50 m higher than the northern wall of the same platform. The platform wall on the southern side is 4 m high and is made up of two superimposed walls (*taludes*). The platform wall on the northern side consists of 3 superimposed walls (*taludes*) and is 5.25 m high. The stairway on the north side is not located in the centre but is slightly shifted to the east with respect to the central axis. The stairway is 9 m wide and consists of approximately 19 steps.

As mentioned, access to Chambers 1 and 2 was through three doorways on the north facade of the building. The central doorway is 1.80 m wide and its jambs are 1.50 m thick. The western doorway is 1.65 m wide, with the eastern jamb 1.66 thick and the western jamb 1.65 m thick. The eastern doorway is 1.58 m wide with the eastern jamb



22. Nakum. Plan of the first floor of Structure G showing remodelling done during the Terminal Classic period (redrawn by the author after Calderón et al. 2003: fig. 31) and representations of two captives which decorated walls constructed during G-1c stage (redrawn by the author after Calderón et al. 2003: figs 20 and 21, Proyecto Triángulo, IDAEH)

being 1.53 m thick and the western jamb 1.55 m thick. Chambers 1 and 2 are 11.6 m long and 1.85 m wide. They were approximately 4.50 m high from the floor to the level of capstones (Calderón et al. 2004). During the excavations carried out in 2002, stone

blocks which once formed the vault of Chamber 1 were discovered. They were stuccoed and painted with many figural scenes which are unfortunately not well preserved. The colours used to paint vault stones are red, black, grey and blue (Calderón and Toraya 2002: 60–63; Figs 62–67). On the southern wall of Chamber 1, there is a doorway 1.80 m wide and leads to the interior space of Chamber 2. Beside the rear wall of this chamber, vestiges of a bench 0.35 m high and covered with stucco and painted red was found.

The western chamber of Structure G is 5.25 m long (N-S), 2.05 m wide (E-W) and approximately 5 m high (from the level of the floor to the capstones). Along the eastern wall of the chamber, a bench extends and is 1.75 wide and 0.70 m high. The doorway of the western chamber is 1.50 m wide and its jambs are 1.50 m thick. In front of the doorway a terrace or bench that is 9.35 m long, 2 m wide and 0.48 m high extends. The terrace rests on the platform of Structure G. To reach the western chamber from this terrace one had to ascend a step 0.40 m high. The same terrace probably extended in front of the doorway of the eastern chamber of Structure G (Calderón et al. 2003). The eastern chamber is 5.64 m long (N-S), 2.24 m wide (E-W) and 4.35 m high (from the floor to the capstones of the chamber). A bench that is 1.40 m wide and 0.70 m high extends along the rear wall of the chamber. A step 0.35 m high leads from the platform of Structure G to the interior of the eastern chamber. The measurements of the doorway and jambs of the eastern chamber are the same as in case of the western chamber. While traces of black paint were found in the interior of the eastern chamber, red paint was detected on the southern jamb of the doorway of the same chamber (Calderón et al. 2004: 28–42). Archaeological investigations of Structure G-1 indicate that it is contemporaneous with Structures E-2 and H-1.

In the sixth construction stage (G-1a), some remodelling work was carried out at the northern, southern and western facade of Structure G. At the northern facade, a new stairway was constructed. It was built 1.85 m north from the stairway of the previous construction stage. The new stairway completely covered the old one from the G-1 stage (Fig. 21). During the same architectural stage, a wall in *talud* style 2.05 m high was constructed at the lower part of the Structure G platform (it covered the lowest body of Structure G platform). Due to this remodelling, the northern part of the platform was widened by 1.30 m (Fig. 22). During the same architectural stage, another wall in *talud* style 2.90 m high was also constructed at the lower part of the southern side of the platform. It widened the platform by 0.82 m to the south (Hermes et al. 2001: 110; Calderón et al. 2003). During the 6-th architectural stage the western facade of Structure G was also modified. A rectangular masonry block 5.25 m long and 2.20 m wide was built on the bench or terrace that extends in front of the western chamber. This small construction covered the southern and central part of the above-mentioned terrace (Calderón et al. 2003, 2004). Excavations revealed that stage G-1a is contemporaneous with Structures E-2a and H-2.

In the seventh construction stage (G-1b), one can see some remodelling done on the platform of Structure G. On the northern side, at both ends of the stairway, at the place where it connects the lowest body of the platform, two masonry blocks in *talud* style were constructed (Fig. 22). The masonry block on the eastern side was 1.24 m (N-S) x 2.20 (E-W) x 2.20 high. The other one, built on the western side of the stairway was 1.24 m (N-S) x 2.45 m (E-W) x 2.15 m high.

During the same architectural stage, the platform of Structure G was also widened by approximately 1.50 m towards the east. On the other side of the building, the small rectangular masonry block built during the 6-th stage on the terrace extending in front of the western chamber was sealed and covered with a fill (in which Offering 22 was deposited). To the western wall of the Structure G platform, a stairway constructed on a N-S axis was also added. This stairway was 1.35 m wide and consisted of 9 steps. It enabled communication between the chambers of Structure G and a complex system of rooms constructed at the same time in the area between Structures H, G and the Interior Acropolis. This building is contemporaneous with Structures E-2b and H-3.

During the eighth construction stage (G-1c), we can see the remodelling of two masonry blocks constructed in the previous stage on both sides of the stairway on the north facade. Both the masonry blocks were covered by the new walls in *talud* style. Thus the eastern block was widened by 1.14 m and the western block by 1.26 m to the north. Both walls were now decorated with stucco representations of prone captives (one captive on each wall) accompanied by glyphs which probably bore their personal names and the place(s) of their origin (Figs 22 and 83).

During the last and ninth architectural stage (G-1d), two *taludes* with representations of the captives were sealed and covered with walls measuring 3.20 (N-S) x 3.20–3.40 m (E-W) x 1 m high. Also, during this stage, on the both sides of the stairway, 1 m wide balustrades (*alfardas*) were constructed (Calderón et al. 2003) (Fig. 22).

It should also be mentioned that a hieroglyphic stairway was discovered by the Triangulo Project in 2006 during restoration work in the central part of the main stairway of Structure G. The glyphs are not well preserved, but according to Simon Martin (personal communication, 2006) their style is very schematic and typical for the Terminal Classic period, bearing close analogies to the contemporaneous inscriptions from the Northern Maya Lowland centres.

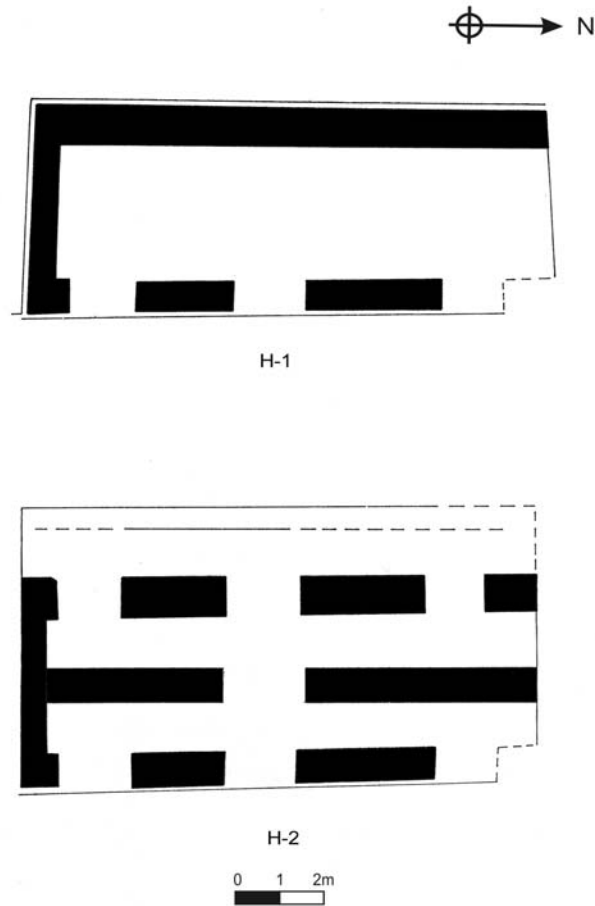
Structure H

Structure H adjoins Structure E from the south. Four architectural stages of Structure H can be distinguished and they can all be dated to the Terminal Classic period.

During the first stage (H-1), Structure H was in the form of a rectangular building constructed on a N-S axis with one chamber measuring 10.70 m x 5.30 m (exterior measurements) and 9.90 m x 3.45 m (interior space). On the eastern facade, the building had three doorways leading to the interior part. The northern and central doorways were both 1.35 m wide and the southern one was 1.45 m wide. In all three cases, the jambs were 0.80 m thick. Structure H-1 might have had a roof constructed from perishable materials (Fig. 23).

During the second construction stage (H-2), in the interior part of the chamber of Structure H, a wall 1 m wide and oriented on a N-S axis was constructed. This wall gave way to two new chambers (nos. 1 and 2) which were vaulted. The chambers were 1.20 m wide and 9.90 m long. In the central part of the wall separating them there was a doorway 2.70 m wide (Fig. 23).

During the same architectural stage, the western facade of Structure H was modified by the construction of three doorways which had a similar orientation as the doorways in the eastern facade. The northern and southern doorways of the western facade are 1.40 m

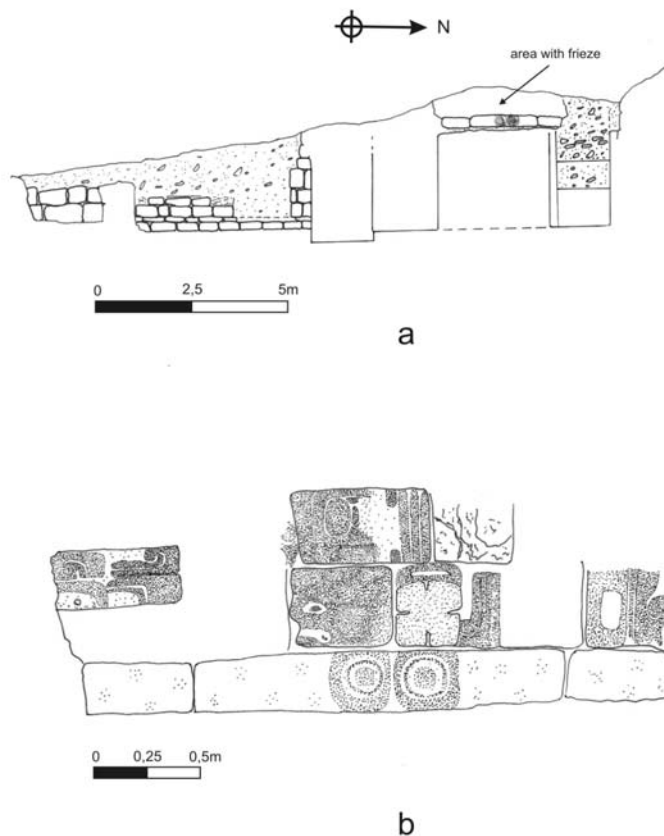


23. Nakum. Plan of Structure H during H-1 and H-2 architectural stages (redrawn by the author after Hermes et al. 2001: fig. 110, Proyecto Triángulo, IDAEH)

wide, and the central one is 1.65 m wide. The jambs in the case of all three doorways are 0.95 m thick.

On some of the stones forming the vault of Chamber 1, traces of black paint have survived. This may indicate that all of the interior space of the chamber was painted in that colour. In the upper part of the eastern facade of Structure H-2 some traces of a frieze representing glyphs made in stucco were discovered. The frieze was 3 m long and 1 m high (Fig. 24).

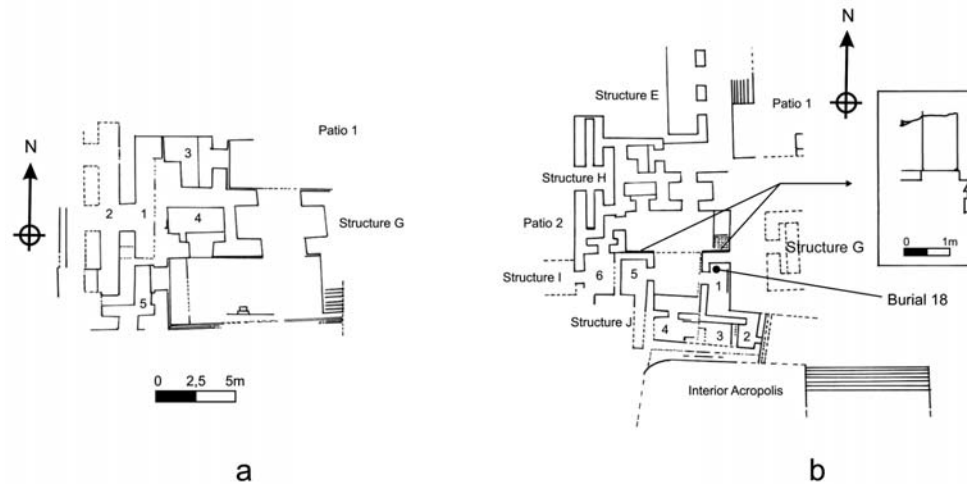
During the third construction stage (H-3), important changes and remodelling are seen in the north, south and east facades of Structure H. The size of Structure H was



24. Nakum, a) section through Structure H (stage H-2) showing area with stucco frieze; b) stucco frieze from western facade of Structure H-2 (redrawn by K. Radnicka after Hermes et al. 2001: figs 107 and 109, Proyecto Triángulo, IDAEH)

enlarged as a result of the construction of three new chambers (nos. 3–5; Fig. 25a). Investigations in the area of these new chambers indicate that most probably they had a flat roof, very similar to the Postclassic buildings.

All the doorways on the eastern facade of Structure H-2 were now closed and two new chambers (nos. 3 and 4) were constructed. Chamber 3 was built in the northern extreme of Structure H and was added to the southern wall of Structure E. Access to that room was located on its eastern side. The chamber measured 3.25 m (N-S) x 3.40 m (E-W) in interior part. Its doorway is 1.15 m wide and jambs are 1 m thick. The bench measuring 1.35 m (E-W) x 1.60 m (N-S) x 0.35 m high was added to the northern, southern and western walls of the chamber. The interior of chamber no. 3 was painted red. Traces of that colour were discovered on its northern wall.



25. Nakum, a) plan of Structure H during H-3 stage; b) Structure H and rooms constructed between Structures G, H, I and Interior Acropolis (redrawn by K. Radnicka after Hermes et al. 2001: fig. 106 and Calderón and Toraya 2002: fig. 105, Proyecto Triángulo, IDAEH)

Chamber 4 was constructed on an E-W axis. Its western limit sealed the central access of Structure H-2. Access to Chamber 4 is located at its southern facade and it is elevated 0.38 m above the floor of Chamber 3. The interior space of Chamber 4 measures 2.15 m (N-S) x 2.35 m (E-W). The doorway is 1.45 wide and the jambs are 1 m thick. A bench 2.35 m long, 1.55 m wide and 0.25 m high was added to the north, east and west walls of the chamber. Chamber 4 was painted red, like Chamber 3. East of Chamber 4 a small double-exit room that connected Structure H with the platform of Structure G was also constructed (Fig. 25a-b).

Moreover, the interior part of Chamber no. 1 was modified due to the construction (at its southern end) of a transverse wall on an E-W axis which was 0.45 m wide. Reduction of the space of Chamber 1 (it is now 7.80 m long) enabled the construction of a new chamber (no. 5) at the southern end of Structure H. Chamber 5 was built on a L-plan and it was 2.50 m long x 1 m wide (wing oriented N-S), and 3.30 m long x 0.70 m wide (wing oriented E-W). It had two doorways. The doorway on the eastern facade was 1.45 wide with jambs 0.80 m thick (E-W). The doorway on the southern facade was 1.25 m wide with jambs 0.90 m thick. A bench 0.30 m high was constructed along the north, west and east walls of the chamber.

Due to the enlargement of the southern limit of Structure H, the passageway connecting Patio 1 with Patios: 2, 3, 4, 5 and 11 was closed.

In the fourth construction stage (H-4), remodelling work in Chambers nos. 1 and 3 can be seen. The bench in Chamber 3 was enlarged and its dimensions are now: 2.14 m (E-W) x 3.25 m (N-S) x 0.35 m high. Inside Chamber 1, a bench which covered the en-

tire interior space of that room was also constructed. On the northern and western walls of Chamber no. 1, traces of red, black and blue paint were discovered. This was part of an almost completely destroyed mural connected with the same construction stage (Hermes et al. 2001).

Related with stage H-3 or H-4 is the construction of a complex system of the rooms (Rooms nos. 1–6) between Structures H, G, J and the Interior Acropolis (Figs. 25b and 84). A small double-exit room connecting Structure H with the platform of Structure G (it had two entrances on the northern and southern sides) gave way from the area of Patio 1 to a small T-shaped space. In the eastern part of this space there was a small stairway that led to the summit of the Structure G platform. At its southern end the above-mentioned space had 2 square pillars (Fig. 84). Close to its southern end, 6 rooms were constructed. Rooms 1 and 2 adjoined to the south-western corner of Structure G; Rooms 3 and 4 were located west of Room 2 and north of the Interior Acropolis. Finally, Rooms 5 and 6 were constructed north of Structure J. The northern exterior walls of Rooms 1 and 5 were decorated at their bases with very characteristic architectural motif which consists of a vertical wall, small moulding and outward-sloping upper member or reverse talud (Fig. 25b). The closest analogies to this kind of motif come from several archaeological sites located in the Puuc area (Fig. 15b). Due to the construction of a system of new rooms, access to the Interior Acropolis and other parts of the South Acropolis was very restricted and controlled. To reach the Interior Acropolis from the area of Patio 1 one had to pass through the room connecting Structures H and G, then go through the very narrow Rooms 1 and 2. On the other hand, to reach Patio 3 and Structures I and J one had to pass through the chamber connecting Structures H and G, then enter a small T-shaped space and go through Chamber 5 of Structure H and finally Room 6, which gave way to Structures I and J (Calderón and Toraya 2002).

Structure I

Structure I is located in the western side of the South Acropolis. It consists of two wings (southern and western) and has a L-letter plan. The southern wing of Structure I separates Patios 2 and 3 and the western wing closes Patio 2 from the west. Only the southern wing of Structure I was investigated. Due to archaeological excavations, two architectural stages of that part of the building can be distinguished: the first dated to the Late Classic (I-1) and the second to the Terminal Classic period (I-1a).

During the first stage, the southern wing of Structure I had a rectangular plan and measured 22 (E-W) x 5.80 (N-S) m. It has three chambers: Chamber 1 is 3.38 m long and 2 m wide; it is 4.30 m high from the floor till the level of the capstones. Chamber 1 has two doorways, one on the northern side of the structure and another on the eastern side. The northern doorway is 0.80 m wide with jambs 1.80 m thick. The eastern doorway is 1.40 m wide with jambs 1.50 m thick. Chambers 2 and 3 were partly excavated in the area of their soffits. Chamber 2 is 5.50 m long and 2 m wide; its doorway is 2.10 m wide. Chamber 3 is 4.40 m long and 2 m wide; its doorway is 1.25 m wide. A stairway 15 long and consisting of 3 steps stretches along the northern facade of Structure I. It enabled one to access all three chambers from this side.

In the second architectural stage (I-1a), the northern facade of Structure I was covered by a wall 1.40 m wide which formed a new facade. Due to this remodelling, the

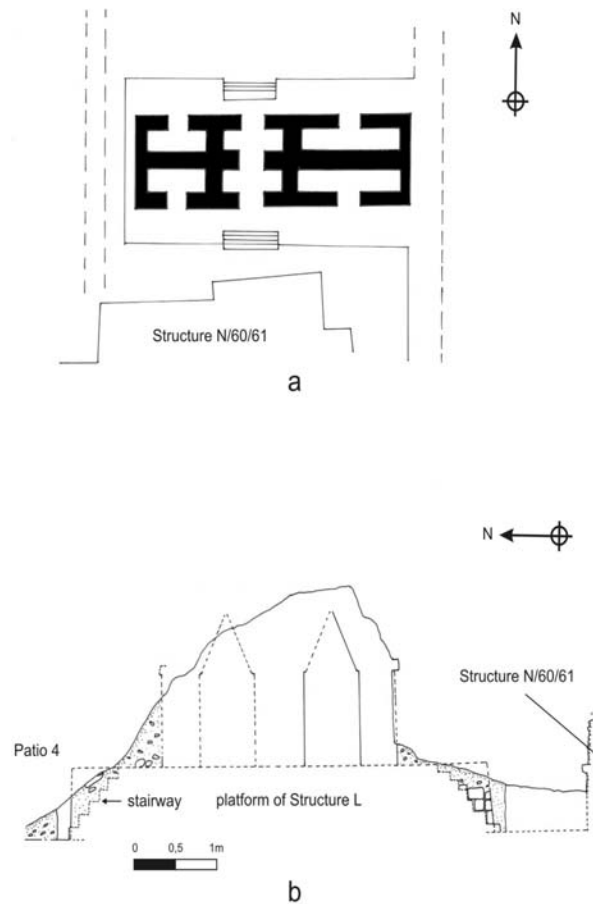
width of Structure I increased to 7.20. The same may be said of the doorjambs of all three chambers; their thickness increased to 3.10 m.

It is very probable that during the Terminal Classic the western wing of Structure I was constructed and added to the existing southern part of this construction. Excavations revealed that at least the southern part of the western wing partly covers the western end of the stairway and the walls of the southern wing of the same structure (Calderón et al. 2003: 85–92).

Structure L

Structure L is located at the southern limit of Patio 4. The building was constructed on the last floor extending north from Structure N/60/61. It consists of a platform surmounted by 6 chambers. The platform of Structure L was made using an interesting technique: walls oriented in an E-W direction were constructed with a distance of 1 to 2.40 m from each other. The space between the walls was then filled with *bajo* mud and small and medium unworked stones. Excavations revealed that construction activity in Structure L consisted of 2 architectural stages, both dated to the Terminal Classic.

During the first construction stage, Structure L had a rectangular plan and measured 30 m (E-W) x 15 m (N-S). The platform of Structure L was 0.70 m high and had two stairways located at its northern and southern sides, consisting of 6 steps. The stairways were approximately 6 m wide. The platform sustained 6 chambers; three of them were accessible from the northern facade and three others from the southern side (Fig. 26). Thus each chamber had its own entrance. Only two central chambers of Structure L were carefully excavated. They were interconnected by a central doorway 2.55 m wide located in the wall separating them. All the chambers are 4.75 m high (interior part) and 2 m wide, but their length is variable. Two chambers located on the eastern end are 11 m long, two central chambers are 6.75 m long and two located on the western extremity of the building are 6 m long. The dimensions of all three doorways located on the northern facade of the building are well known. The central doorway is approximately 2.50 wide. The doorway which leads to the eastern chamber of the northern facade is located 6.40 m east of the central doorway. It is 1.98 m wide with jambs 1.30 m thick. The doorway of the western chamber of the northern facade is also located 6.40 m west of the central doorway. Its dimensions are the same as in the case of the eastern doorway (Calderón et al. 2004: 54). All three doorways located on the southern facade of the building had very similar dimensions. A cornice is present at the upper exterior part of the walls of Structure L (Hermes et al. 2001: 154, Calderón et al. 2004: 54–55). Tozzer (1913) mentions a well preserved mask found on the eastern end of the building, above the cornice. This mask has partly survived and it was detected during excavations carried out between the eastern wall of Structure L and platform of the South Acropolis. This mask most probably represents Chaak or Itzamnaaj. It is possible that similar masks or different decorations embellished upper part of other exterior walls of Structure L. In 2004, investigations along the western part of the northern facade of Structure L resulted in the discovery of many collapsed stones. Some of them, located at a depth of 0.20 to 1.83 below the surface, had remains of reliefs (Calderón et al. 2004: 53). They were probably part of decorations that embellished the upper part of the northern facade of Structure L.



26. Nakum. Plan and section of Structure L (fig. *a* redrawn by the author after Hermes et al. 2001: fig. 114, fig. *b* redrawn by the author from Calderón and Toraya 2002: fig. 77, Proyecto Triángulo, IDAEH)

It should also be stressed that traces of red paint were discovered on the north and east walls of the central-southern chamber of Structure L, indicating that the interior of the chamber was probably painted red (Calderón and Toraya 2002: 77).

The floor of the chambers is elevated 0.35 m above the floor of the platform of Structure L. A single interconnecting step provided access from the level of the platform to all the chambers of Structure L.

During the second construction stage (L-1a), small examples of remodelling are seen in the previous structure (L-1). The height of the platform floor was elevated from 0.70 to 1.24 m. Due to this remodelling, the new floor of the platform covered the lower part of the chambers' exterior wall.

Structure N/60/61

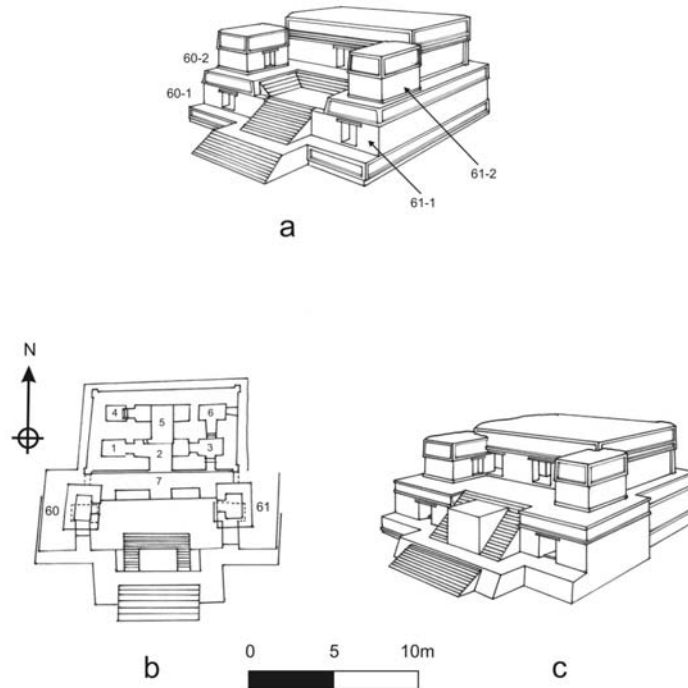
This structure constitutes a set of three buildings located in the south-western corner of the South Acropolis (Fig. 85). Excavations revealed seven architectural stages of that structure, the first six dating to the Late Classic and the last and seventh stage to the Terminal Classic period (Hermes et al. 1999: 92–94). At the end of the Late Classic, Structure N/60/61 was a two-tiered palace that consisted of three buildings: 60 (at the southern end of the structure), 61 (at the northern end of the structure) and the larger Building N with six chambers. On the eastern facade of Structure N/60/61 a stairway 5 m wide led from the level of the plaza to the first tier from where one could access two chambers called 60-1 and 61-1. Another stairway 4 m wide led from here to the second tier where three buildings (nos. 60-2, 61-2 and N) existed (Fig. 27a). During the last architectural stage, a new version of stairway that led from the first to the second tier of Structure N/60/61 was built. In the central part of this new stairway, a solid masonry block in the form of a podium was also constructed (Fig. 27c). Burial 4 was deposited in the fill of the stairway block. Moreover, during the seventh architectural stage, in front of the eastern facade of Building N, a new chamber (no. 7) 16.30 (N-S) long and 2 m (E-W) wide was constructed (Fig. 27b–c). The main – eastern wall of this chamber partly covered the exterior walls of Buildings 60-2 and 61-2. There were three doorways to access the interior space of Chamber 7 from the eastern side. Their exact dimensions are not known due to advanced decay of the structure. During the same architectural stage, two masonry blocks in the form of taluds were also constructed on both sides of the lower stairway that led from the level of the plaza to the first tier of the structure. They were built in the place where the stairway adjoins the platform of Structure N/60/61. Other masonry blocks were constructed on both sides of the stairway leading from the first to the second tier of Structure N/60/61. The facade of Buildings 60-1 and 61-1 along with the wall of the platform of Structure N/60/61 was also covered with new masonry and stucco.

A midden that contained a large amount of Terminal Classic ceramics was found on the southern end of the first floor of Structure N/60/61. Numerous materials from the same period were also discovered south of Structure N/60/61 at the level of the plaza of the South Acropolis platform (Hermes and García 1998). It seems that people who inhabited this building during the Terminal Classic period threw their refuse on the platform of Structure N/60/61 as well as to the south of it.

Structure O

Structure O is located at the southern end of the South Acropolis, east of Structure N/60/61. Archaeological investigations carried out in the area of Structure O were limited to the excavation of only two chambers (nos. 1 and 5). During the excavations, two architectural stages could be distinguished, both dating to the Terminal Classic period.

In the first phase (O-1), Structure O had a rectangular plan and measured 44 m (E-W) x 5.80 m (N-S). It consisted of 5 chambers: three rectangular, located on the northern facade and two transverse, located on the eastern and western ends of Structure O (Fig. 28). The southern wall of Structure O, which was approximately 6 m high originally, is now only 3.60 m. It was painted black. The other exterior walls of Structure O were probably also painted in the same colour. The northern wall of Structure O was set up on the up-



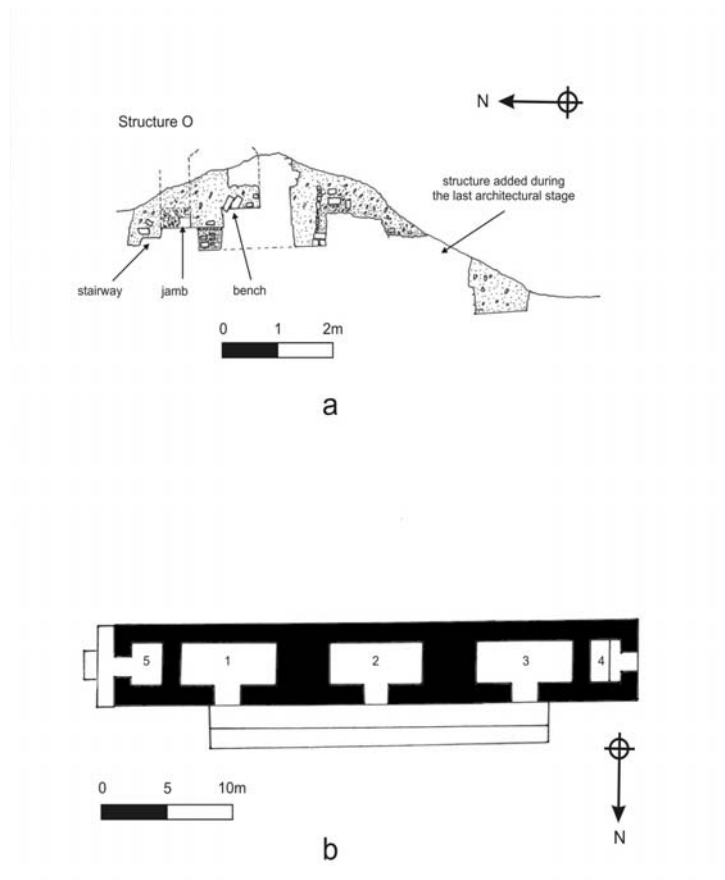
27. Nakum, a) reconstruction view of Structure N/60/61 during the fifth architectural stage, Late Classic; b-c) plan and reconstruction view of Structure N/60/61 during the seventh architectural stage, Terminal Classic; a,c) redrawn by K. Radnicka after Hermes 2002: fig. 2.3), b) redrawn by K. Radnicka after Noriega and Hermes 2000: fig. 3

permost floor of Patio 5. All the chambers of Structure O were accessible by a stairway consisting of two steps, located in the central part of the northern facade of the structure. This stairway extended in front of all three frontal chambers and facilitated communication between them. One excavated chamber (no. 1) may provide us information about the dimensions of the other two unexcavated rooms (nos. 2 and 3) which were probably very similar in shape and dimensions. Chamber 1 measured 6.50 x 2.50 m and had a bench (1.30 m wide and 0.73 m high) added to its southern wall. Access to all three rectangular chambers was located in the central part of their northern wall.

Two transverse chambers located at the western and eastern ends of Structure O have similar dimensions. They measure 2.90 (N-S) x 2.50 (E-W) and have a bench (1.20 m wide and 0.65 m high) going all along their back walls. These chambers were approximately 4 m high and their interior was painted red.

Structure O-1 is contemporaneous with the last and 7th construction stage of the neighbouring Structure N/60/61 (Hermes et al. 2001).

The second construction stage (O-1a) consisted exclusively of remodelling work. The benches of all three rectangular chambers were widened to the north. In the area of

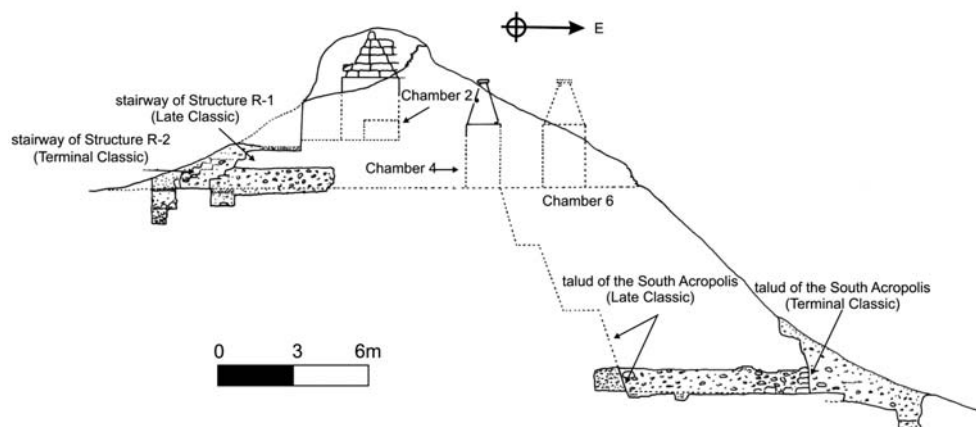


28. Nakum. Section and plan of Structure O, a) redrawn by K. Radnicka after Hermes and Calderón 2002: fig. 98, Proyecto Triángulo, IDAEH, b) redrawn by K. Radnicka from Quintana and Wurster 2002: fig. 27

the south-eastern corner of Structure O, a small building measuring 15 m (E-W) x 7.50 m (N-S) was also constructed (Fig. 28a). It partly covered the southern wall of Structure O. Its function was not determined (Hermes et al. 2001).

Structure R

Structure R is located in the eastern part of the South Acropolis, exactly on the eastern side of Patio 9. The architectural history of this building consists of five construction stages: one (R-1) dating to the Late Classic period, and the next four (R-2, R-2a, R-2b and R-3) to the Terminal Classic.

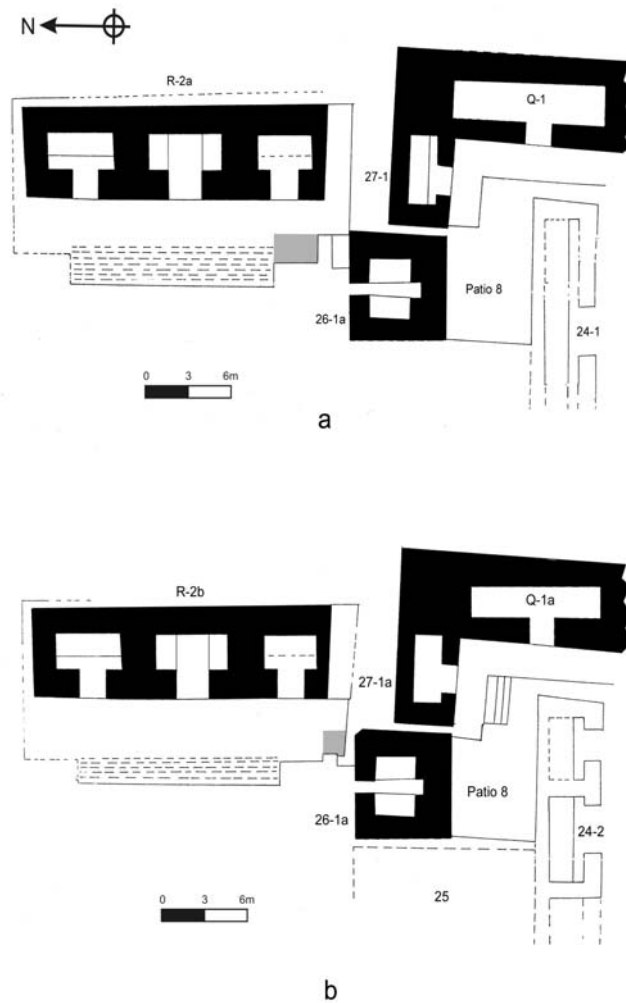


29. Nakum. East-west section through Structure R showing the extent of the South Acropolis platform during the Late and Terminal Classic periods (redrawn by K. Radnicka after Hermes and Calderón 2000: fig. 72, Proyecto Triángulo, IDAEH)

Structure R-1, constructed in the Late Classic, consisted of three chambers located on a small platform. It had a rectangular plan and measured 18 m (N-S) x 6.60 m (E-W). The building was set on the penultimate floor of Patio 9. Access to the three chambers of Structure R was possible by a stairway 10.50 m wide (N-S) located in the central part of the building on its western side. The stairway led to the small space of Structure R platform between 1.80 and 1.30 m wide, located all along the western facade of the building. Access to each chamber led from this space.

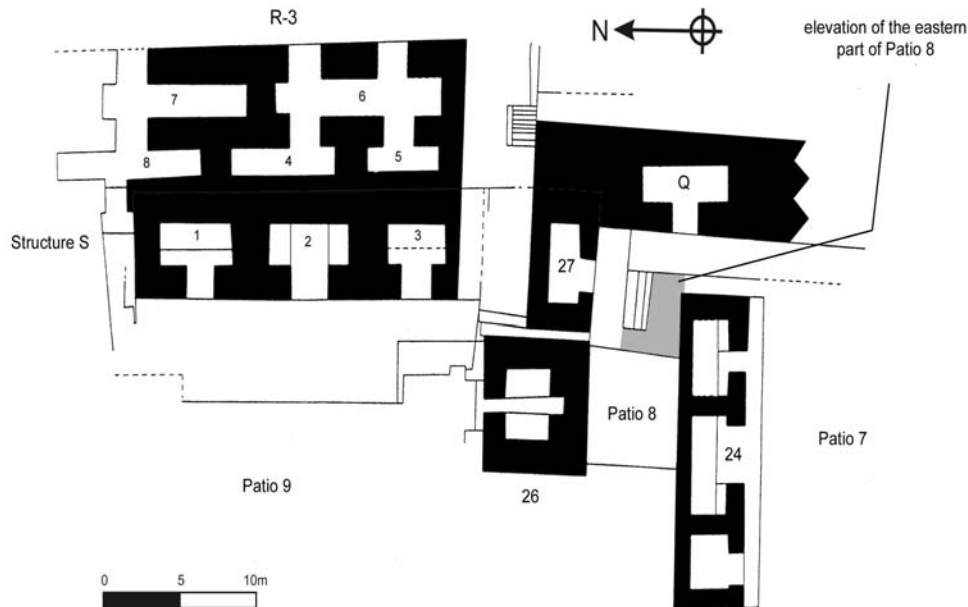
The chambers measured 4.60 m x 2.50 m and were approximately 4.50 m high. Chambers 1 and 3 had a bench which stretched along their eastern wall. Both benches were 1.50 m wide and 0.55 m high. Chamber 2 had two benches that stretched along its northern and southern walls. The corbelled vault in the three chambers of Structure R-1 was stepped. The northern wall of Structure R is 4.15 m high from base to cornice. The area above the cornice was decorated with a representation which, unfortunately, is now heavily destroyed but was once registered by Tozzer (1913: Fig. 76) and Morley (1937–38). It represents a person sitting and holding an object in his hands (Hermes et al. 2001: 47).

In the second construction stage (R-2) which is dated to the Terminal Classic, the previous structure was still used. The new version of the stairway leading to Structure R was constructed and consisted of 9 steps. The stairway was 13.50 m wide and it jutted out 3.45 m to the west of the building platform (Fig. 29). During the same architectural stage, the level of the platform floor of Structure R in front of its western facade was elevated by 0.20 m. Structure R-2 is contemporaneous with Structure 26-1.



30. Nakum. Plan of Structure R during the third (R-2a) and fourth (R-2b) architectural stages with other contemporaneous structures. Masonry blocks added during these stages are shaded (redrawn by the author from Hermes and Calderón 2000: figs 94 and 95, Proyecto Triángulo, IDAEH)

In the third construction stage (R-2a), on the southwestern part of the structure in the area when the platform of the building connects with its stairway, a masonry block measuring 3 m (N-S) x 2.30 m (E-W) was added. During the same architectural stage, the southern wall of Structure R was mutilated and the space of the southern chamber was reduced. The platform of Structure R was also lengthened to the north and to the south by 0.80 m. It now almost adjoined the north-eastern corner of Structure 26 (Fig. 30a). This construction stage is contemporaneous with Structures Q-1, 24-1, 26-1a and 27-1.



31. Nakum. Plan of Structure R during the fifth architectural stage (R-3) (redrawn by the author from Calderón and Toraya 2002: fig. 20, Proyecto Triángulo, IDAEH)

The next and fourth construction stage (R-2b) is delineated by the addition of another masonry block measuring 1.78 m (N-S) x 1.50 m (E-W) to the south-western corner of the building (Fig. 30b). Due to this minor remodelling, the space between Structures R and 26 was reduced to a very narrow (0.40 m wide) corridor. This version of Structure R is contemporaneous with Structures Q-1a, 24-2, 26-1a and 27-1a (Hermes et al. 2001: 47).

During the last and fifth construction stage (R-3), Structure R underwent a major re-modelling programme. To enlarge this building, the platform of the South Acropolis was widened by 7.50 m to the east and a new system of five chambers (nos. 4-8) was constructed on the east side of Structure R (Figs 29 and 31) (Calderón and Toraya 2002: 25–26). This new system of chambers of Structure R is also connected with the eastern end of Structure S such that the facade of both buildings is connected by Chambers 7 and 8.

Access to the new chambers was possible either from the eastern side by 3 doorways or from the western side by a corridor going between Structures R and S. The corridor was created by the reduction of the north-eastern corner of the platform of Structure R and the south-eastern corner of Structure S, making communication between the new eastern chambers of Structure R and Patio 9 possible. Chamber 6 was connected with Chambers 4 and 5 and Chamber 7 was connected with Chamber 8 (Fig. 31). Access to Structure R from outside the South Acropolis was possible due to the construction of

a stairway on the eastern wall of the platform of this complex. This stairway led to the area between Structures R, Q, 26 and 27. Excavations revealed that Structure R-3 is contemporaneous with Structures Q-2 and 2a, 24-2a, 26-1b and 27-2.

Structure 26

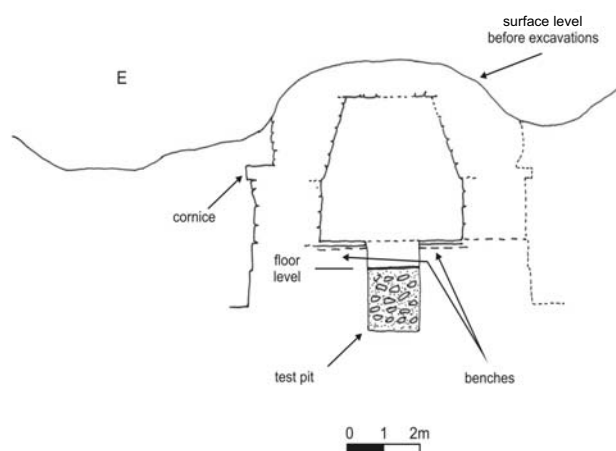
Structure 26 served as a sweatbath and is located in the eastern part of the South Acropolis, at the southern end of Patio 9. This building constitutes an example of a structure that was completely built and rebuilt during the Terminal Classic period. However, traces of cultural activity dating from the end of the Middle Preclassic to the Late Classic period (mainly connected with elevation of the patio level) were also discovered beneath the building (Hermes and Calderón 2000: 57-59).

During the first architectural stage (26-1), the building was constructed on the level of the second floor of Patio 8 (op. VII, subop. 5) and the first floor of Patio 9. It has a square plan (7.35 x 7.35m). The entrance to the building is located at its northern facade and is 1.70 m high and 0.75 m wide (Fig. 32). Each exterior wall of Structure 26 has a cornice in its upper section. The height of the northern wall of Structure 26 is 2.40 m (from the ground to the moulding of the cornice in the upper section of the wall), while the southern wall is 5.15 m high (from the ground to the moulding of the cornice on the upper section of the wall) because the level of Patio 8 was located much lower than the level of Patio 9.

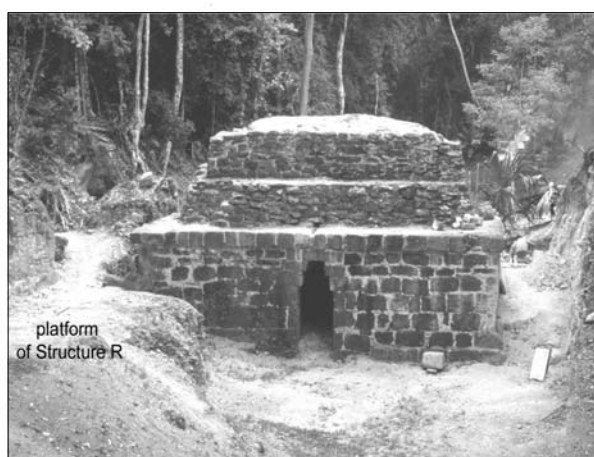
The thickness of the walls of Structure 26 is variable. The northern wall is 1.50 m thick; the eastern, 1.60 m; southern, 2.40 m; and the western, 2 m thick. The interior space of the building measures 3.95 m (N-S) x 2.90 m (E-W) or 11.16 square metres. There are two benches inside (0.62 m high) which adjoin the eastern and western walls. The benches take up most of the interior space of the building. Between them, a small corridor exists and is set on the axis of the entrance (Fig. 32a). The maximum interior height of the chamber is 4.25 m from the floor (which is on the same level as the floor of Patio 9) to the capstones. In the central part of the southern wall, a 1 m³ niche exists 1.10 m above the floor, its dimensions being 1 m high, 0.97 m wide and 0.96 m deep. The niche was covered with stucco, which upon excavation showed traces of soot and burning. On the eastern wall of the niche there was a small opening (diameter, 0.15 x 0.13 m) which probably served as a ventilator (Hermes and Calderón 2000: 58).

During the second architectural stage (26-1a), only minor remodelling of the previous structure was made. Two benches were added to the lower part of the northern exterior wall of the building on both sides of the entrance. The dimensions of the benches are as follows: 2.20 m long, 0.47 m wide and 0.31 m high. The southern facade of Structure 26 remained intact but in the area of Patio 8, a new building (Structure 27-1) was constructed. Between this new construction and the eastern wall of Structure 26, a new corridor linking Patio 8 with Patio 9 was established.

In the third and last construction stage (26-1b), the niche inside Structure 26 was filled with small stones mixed with lime mortar and sealed. Hermes and Calderón (2000: 59) suppose that this remodelling might be connected with a change in the use of the building. After this remodelling, Structure 26 probably lost its original function as a sweatbath. Most probably during the same stage outside Structure 26, in the western



a



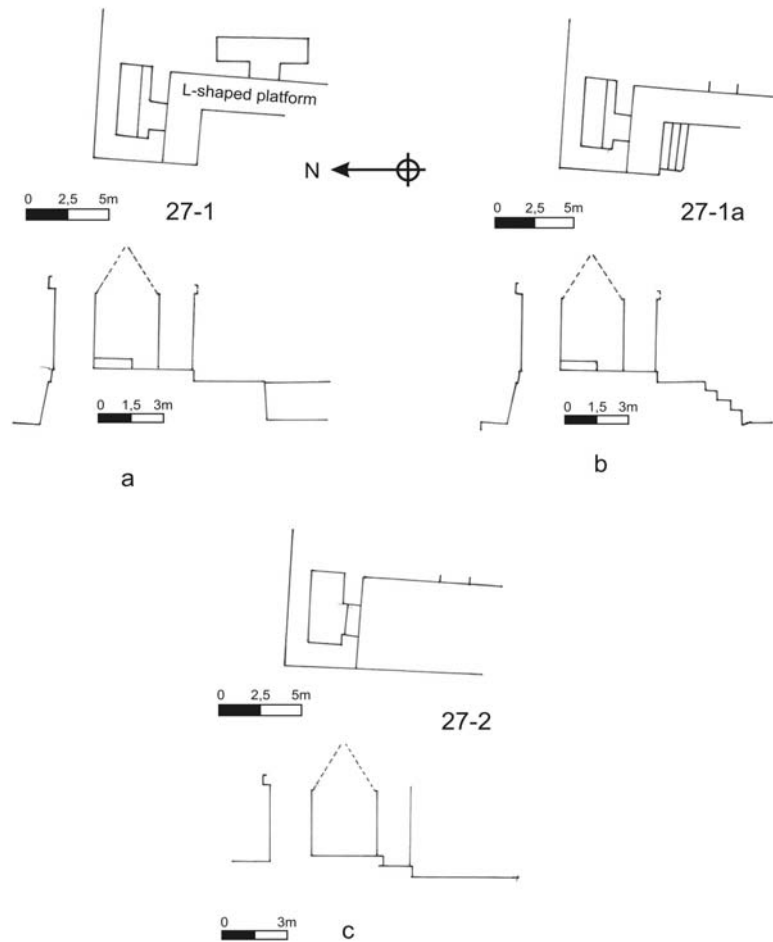
b

32. Nakum, a) east-west section of Structure 26 (redrawn by K. Radnicka after Hermes and García 1998: fig. 66, Proyecto Triángulo, IDAEH); b) Structure 26 – view from the north (photograph by the author)

part of Patio 8, a new floor was paved and the corridor between Structures 26 and 27 was filled with rubble and closed.

Structure 27

Structure 27 is located in the north-eastern part of Patio 8; from the north, it is bordered by Structure R, from the east by Structure Q and from west, by Structure 26. It is a single chamber with access from Patio 8 (Fig. 29). All three construction stages of that structure date to the Terminal Classic period.



33. Nakum. Architectural stages of Structure 27 (redrawn by K. Radnicka after Hermes and Calderón 2000: figs 53, 54 and 55, Proyecto Triángulo, IDAEH)

In the first construction stage (27-1), the building had a rectangular plan and measured 6.25 (E-W) x 4.40 (N-S). In the upper part of the exterior walls, there was a cornice which, unfortunately, is extensively destroyed. Access to Structure 27 was located at the southern facade through a doorway 1.75 m wide. To reach the chamber of Structure 27 from the level of Patio 8, one had to ascend a long L-shaped platform that extended along the main facade of Structure 27 as well as along the facade of the contemporaneous Structure Q-1 (Fig. 33a). The northern and eastern wall of Structure 27 was 4.40 m high from its base to the cornice. The western wall is not well preserved because it was partly destroyed in the later construction stages. The interior part of the chamber measures

4.50x2 m and was painted red. The height of the chamber was probably 3.50 m from the floor to the capstones. A bench 1.30 m wide and 0.30 m high extended along the northern wall of the chamber. Construction 27-1 is contemporaneous to Structures R-2a, 26-1a, Q-1 and 24-1.

In the second stage (27-1a), a stairway consisting of three steps was constructed in front of Structure 27. The stairway was 2.75 m wide and provided access to the L-shaped platform on which Structure 27 was located (Fig. 33b). This architectural stage is contemporaneous with Structures R-2b, 26-1a, Q-1a and 24-2.

In the third construction stage (27-2), the height of the northern wall of Structure 27 is reduced to 1.85 m due to the construction of a new floor (Floor 1 covering the small area between Structures Q, R, 26 and 27). During the same architectural stage the stairway leading to the platform in front of the main facade of Structure 27 was covered by a new floor which was paved in the eastern part of Patio 8. The new floor was constructed up to the level of the L shaped platform in front of Structures Q and 27. Additionally, during this construction stage, the bench inside Structure 27 was extended and covered the entire area of the chamber floor (Fig. 33c). This remodelling led to the elevation of the floor of Structure 27 by 0.40 m and reduced the interior height of the building. During this construction stage, the interior part of Structure 27 was also painted black. Excavations in the neighbouring constructions indicate that Structure 27-2 is contemporaneous with Structures R-3, 26-1b, Q-2 and 24-2a (Hermes et al. 2001).

Structure Q

Structure Q is located in the eastern part of the South Acropolis. Archaeological excavations in the area of Structure Q revealed four construction stages (Q-1, Q-1a, Q-2, Q-2a), all dating to the Terminal Classic period. Architectural stages of Structure Q are strictly related to that of the neighbouring Structure 27.

Structure Q-1, constructed during the first architectural stage, had a rectangular plan and was 55 m long (N-S) and 6.50 m wide (E-W). It consisted of seven rectangular chambers, each measuring approximately 5.50 m (N-S)x 2 m (E-W). The chambers had corbelled vaults which have unfortunately collapsed. The central chamber of Structure Q (Chamber 4) has a bench shaped as a throne added to its eastern wall. The chambers were located on a platform 1.43 m high and set on Floor 4 of the area which connects Patios 7 with 8. The central part of the platform had a stairway which consisted of 3 steps. They led to the upper part of the platform which functioned as a corridor from which one could reach all seven chambers of Structure Q. At the northern end, the platform was elongated to the west to form a L shaped design. The elongated fragment of the platform supported Structure 27 (Fig. 29). Structure Q-1 is contemporaneous with Structures R-2a, 24-1, 26-1a and 27-1.

During the second architectural stage (Q-1a), we can only see construction of a stairway which gave access to Structure 27 (stage 27-1a). The stairway was added to the northern extreme of the L-shaped platform. This remodelling is contemporaneous with the following architectural stages: R-2b, 24-2, 26-1a, 27-1a.

In the third construction stage (Q-2), the eastern part of Patio 8 was elevated due to the construction of a new floor in the area between the Structures Q, 26 and 27. Due to this remodelling the platform on which Structures Q and 27 rested was on the same

level as the floor of the eastern part of Patio 8 (Fig. 30). During the same architectural stage, the platform of Structure Q which bordered the area of Patio 7 was widened 4.40 m to the west, partly covering the south-eastern corner of Structure 24. Moreover, in the small space between Structures R and Q, a stairway on an E-W axis was constructed and led to the area between Structures R and 27; and from there to Patio 9. This construction is contemporaneous with Structures R-3, 24-2a, 26-1b and 27-2.

In the last and fourth construction stage (Q-2a), small-scale remodelling can be observed in the north-eastern corner of Structure's Q platform. In that area, two new steps were constructed; these steps covered the two lower steps of the stairway which was used to connect the area between Structures R and Q with the space between Structures 26, 27 and R. There is some archaeological evidence that indicates that the above mentioned steps constructed during this architectural stage were related in some way with another remodelling effort which included the covering of the southern part of the eastern walls of the South Acropolis platform with a clay layer. Excavations revealed that stage Q-2a is contemporaneous with Structures R-3, 24-2a, 26-1b, 27-2 (Hermes et al. 2001).

Structure 24

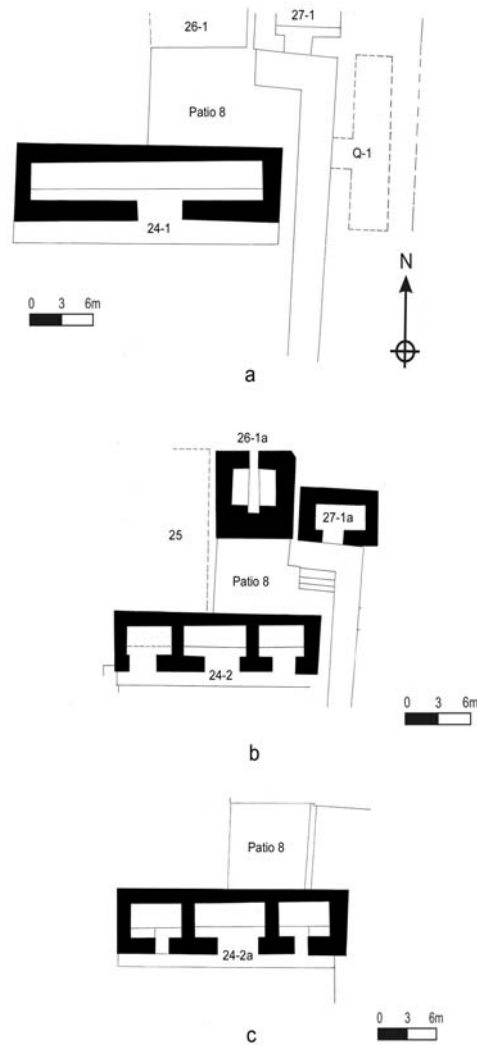
Structure 24 is located in the south-eastern part of the South Acropolis; it limits Patio 7 on the north and Patio 8 on the south. Excavations revealed 3 architectural stages of this structure, all dating to the Terminal Classic period. In the first construction stage (24-1), Structure 24 had a rectangular plan and measured approximately 21.80 (E-W) x 10.50 (N-S) m. It consisted of a low platform that supported a single long chamber (Fig. 34a). Structure 24 had a cornice in the upper part of the walls on all four sides but only a small part of that survived. The frontal or southern facade of the building had one doorway which opened to the area of Patio 7. Chamber of Structure 24 measured 15.50 (E-W) m x 2.45 (N-S) m. A long bench ran all along the northern wall of the chamber. The space in front of the bench was very narrow, between 0.67 and 0.72 m.

As a result of the construction of Structure 24-1, a courtyard located at the east side of the South Acropolis was divided into Patios 7 and 8 (Fig. 30). Structure 24-1 is contemporaneous with Structures R-2a, 26-1a, Q-1 and 27-1.

In the second construction stage (24-2), the height of the eastern wall and eastern end of the northern wall were reduced due to the elevation of the eastern part of Patio 8 floor. During the same architectural stage the chamber of Structure 24 was divided by two partition walls creating 3 new and independent chambers. Each chamber had its own access from the south side (Fig. 34b). The central chamber was the largest, 4.90 m in length; the length of the west and east chambers were approximately 3.80 m.

Additionally, during the second architectural stage the bench of the central chamber of Structure 24 was transformed into a kind of a throne due to the construction of two stone elements 1.22 m high at both the western and eastern extremities of the chamber. Unfortunately, they were heavily destroyed by looters. Structure 24-2 is contemporaneous with the neighbouring Structures, R-2b, 26-1a, Q-1a and 27-1a.

During the third construction stage (24-2a), the width of the eastern and western chamber doorways were reduced by 50% (Fig. 34c). Access of the eastern chamber was reduced in the eastern half and the access of the western chamber was reduced in its



34. Nakum. Architectural stages of Structure 24 (redrawn by the author from Hermes et al. 2001: figs 74, 75 and 76, Proyecto Triángulo, IDAEH)

western half. The level of the interior floor of Structure 24 was elevated by 0.35 m while at about the same time the platform of Structure Q-2 was enlarged to the west and partly covered the south-eastern corner of Structure 24-2a. Structure 24-2a is contemporaneous with Structures R-3, 26-1b, Q-2 and 27-2 (Hermes et al. 2001).

Structure S

This structure is located in the central-eastern part of the South Acropolis. It separates Patios 9 and 10. Limited excavations of Structure S started in 2001 when one small test pit was excavated in its interior. Subsequently, a more detailed investigation was conducted in 2004 and 2005, in the exterior part of the building (Hermes et al. 2001, Calderón et al. 2004). Investigations in the area of Structure S showed the presence of two or three architectural stages, all dating to the Terminal Classic period.

Structure S in its first stage (S-1) had a rectangular plan and measured 18.30 m (E-W) x 6.50 m (N-S). It had only one chamber 15.75 m long and approximately 3.60 m wide; the access was located in the central part of the north facade. This access gave way to the area of Patio 10. In its upper section, the exterior walls of Structure S bear a cornice which is only partly preserved. The area above the cornice was most probably decorated with stucco and stone sculptures on all exterior walls of the building. Tozzer (1913: 183, fig. 79) mentions in his report about “a small portion of a mask design” on the upper part of the northern facade. Excavations started in March 2005 resulted in the discovery of a mask in the northeastern corner of Structure S. In all probability, this is the same mask that was mentioned by Tozzer in his report. The mask may represent a *witz* monster.

During the same architectural stage or slightly later a low platform 10 m long, 5.25 m wide and approximately 0.80 m high was constructed west of Structure S. The south-eastern sector of this platform connects with the western wall of Structure S and it is obvious that the platform closed communication between Patios 9 and 10 during the Terminal Classic period. The platform could be reached from the area of Patio 9 by a stairway consisting of 4 or 5 steps. Another stairway constructed on the E-W axis led from the area of Patio 10 to the small terrace or bench extending along Structure 14 and from here it led to the summit of the platform (Calderón et al. 2004).

During the second architectural stage (S-1a), the interior space of Structure S' chamber was elevated 0.60 m by the construction of a new floor.

The construction of new chambers in the eastern facade of Structure R (stage R-3) directly affected the eastern end of Structure S. Due to this activity, Structure S was enlarged and reached a length of 24 m (E-W). The eastern end of Structure S was unified by two long chambers (nos. 7 and 8) with Structure R-3. However, the original width of Structure S was not changed.

It is possible that the remodelling of Structure R, which was enlarged to the east, was also connected with the remodelling of Structure T, which may (at least in its last architectural stage) be dated to the Terminal Classic.

Structure U

Structure U is located on the eastern side of the Southeast Plaza. It consists of a huge pyramid platform topped by a temple superstructure with a single chamber (Fig. 5). Two architectural stages can be distinguished as a result of excavations carried out in 2004 at the summit temple of Structure U and at the base of the pyramid platform. Major construction was done in the first stage while the second one included minor remodelling of the temple.

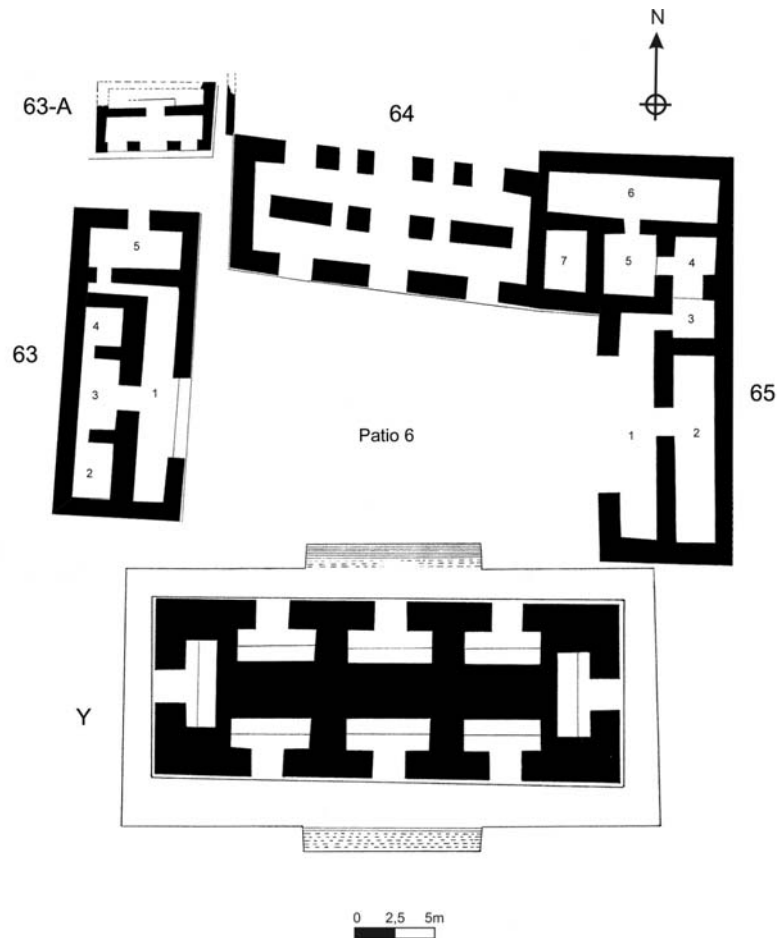
During the first architectural stage, a six-stepped pyramid platform was constructed. It was topped by a superstructure with one long room and a doorway (2.16 m wide) on its western facade. The room measured 6.08 x 1.02 m. The walls of the room were constructed of masonry to a height of approximately 3 m. However, the roof was made of perishable materials. Archaeological material recovered from both excavations (one large excavation unit made in the floor of the temple of Structure U and another made at the base of the pyramid stairway) revealed that the first stage can be dated to the Late Classic period (Tepeu 2). In the second architectural stage, the width of the temple doorway was reduced by 0.40 m. Also, the western wall was enlarged to the west by 0.30 m. The main aim of this remodelling was to add masonry corbelled vault to the temple of Structure U. The dating of this stage is problematic but small amounts of sherds recovered from the area of the vault and masonry added to the western wall of the temple indicate that it too can be dated to the Tepeu 2 phase.

Archaeological finds made in the interior part of the temple are of great interest, given the subject of this book. The first cultural layer located directly above the temple floor was 0.20 m thick and contained ceramics from the Late Classic period. This layer consisted of soil and ash and was full of the bones of small rodents. The next cultural layer was 0.47 m thick and also contained Late Classic sherds exclusively. It should also be mentioned that traces of two fires were discovered in this layer. The first one was located in the northern extreme of the temple room, 0.30 m above the floor level. Traces of the second fire were discovered south of the first and were located 0.20 m above the floor level. Above that level, a layer containing stones from the collapsed vault mixed with soil that contained Terminal Classic sherds began (Calderón et al. 2004).

All the data collected during excavations carried out in the interior of the temple of Structure U indicate that this building must have already been abandoned during the Late Classic period when soil and ash accumulated in the temple room and people (who left traces of two fires) used it for unknown purposes. It seems likely that the temple vault partly collapsed during the Terminal Classic. During this period, people might have visited the temple and left fragments of Terminal Classic sherds which were discovered during excavations.

Interior Acropolis

The Interior Acropolis is the highest point of the city and is located in the heart of the South Acropolis. Investigations realized in this complex included excavating tunnels in the northern and western side of the Interior Acropolis platform as well as the opening of a test pit at the summit. These investigations revealed six construction stages for this complex: the first dating to the transition between the Middle and Late Preclassic and the last, to the Terminal Classic. The first version of the Interior Acropolis consisted of a large three-terraced platform 12.75 m high and approximately 20 m long on one side which was surmounted by at least one structure. At the beginning of the Late Preclassic period this complex was rebuilt and it consisted of a platform topped by three structures arranged in a triadic pattern. At the end of the Late Preclassic period these structures were sealed and the Interior Acropolis was enlarged. It was probably between 28 and 30 m long on one side and 16 m high. During the Late Classic period the Acropolis



35. Nakum. Plan of Patio 6 (drawing by the author, Proyecto Triángulo, IDAEH)

was modified twice but vestiges of these remodellings were heavily destroyed by later Terminal Classic activity.

Based on the archaeological investigations in the area of the Interior Acropolis it is known that in the Late Classic this complex consisted of a three-terraced platform with a stairway on its north side. The walls of all the terraces of the platform were in the form of taluds and were constructed of well-worked stones. Excavations indicate that at that time there were no structures at the top of the Interior Acropolis.

In the last construction stage, dating to the Terminal Classic, a new version of the Interior Acropolis consisting of a three-terraced platform was constructed. The lowest terrace of the platform was in the form of a vertical wall and the two upper terraces were in the form of taluds. On the northern side of this complex, a new version of a stairway was also constructed. During the Terminal Classic period all the buildings now seen were also built on the summit of the Interior Acropolis. They constitute the Patio 6 group

(Fig. 35). The largest was Structure Y – a palace-like structure located at the southern end of Patio 6. Structure Z was constructed around the same time as Structure Y and it is a two-tiered palace built on the eastern side of the platform of the Interior Acropolis.

Excavations undertaken in the area of Patio 6 in the year 2003 indicate that at least two architectural stages in that area can be distinguished (Calderón et al. 2003). Palace Y was constructed on a penultimate floor of Patio 6 during the first architectural stage. During the second stage, the area of Patio 6 was paved (Floor 1) and four new structures (nos. 63, 63 A, 64 and 65) were built on it (Fig. 35).

Investigations realized in the area between Structures G, H, I, J and the Interior Acropolis indicate that during the Terminal Classic period the lower part of the Interior Acropolis complex also saw some small scale remodelling. This remodelling was most probably related with the construction of the complex system of 6 rooms between Structures G, H and J and it involved the covering of the lower part of the northern facade (western side) of the Interior Acropolis platform with new masonry. This new masonry connected the southern walls of Rooms 2, 3 and 4.

Structure Y

Structure Y was constructed on the penultimate floor of Patio 6. Investigations of Structure Y carried out in 2001 and subsequently in 2003 and 2004 were limited to excavations of two chambers located on the northern facade of the structure (Chambers 1 and 3), one chamber on the western side of the building (Chamber 4) and excavations realized along the platform of Structure Y in order to check its extent and dimensions. A small trench was also excavated in the northern facade of Structure Ys' platform. Investigations revealed two architectural stages for Structure Y, both dating to the Terminal Classic period (Hermes et al. 2001, Calderón et al 2003, 2004).

The structure built during the first stage (Y-1) had a rectangular plan and measured 33.70 m (E-W) x 15.45 m (N-S). It was constructed on Floor 2 of Patio 6. Structure Y consists of a single terraced platform 1.90 m high topped by a building with eight chambers, each accessed by a single doorway: three on the northern facade, three on the southern and one each on the western and eastern facades (Fig. 35). There is an outset stairway on the northern side of the platform. It is 11 m wide and it is assumed that it consisted of 5 steps. The platform summit provided access to all eight chambers.

Structure Y was roofed by a corbelled vault (now collapsed). The exterior wall of Structure Y had a cornice which is only partly preserved. The rectangular chambers located on the eastern and western sides of Structure Y are approximately 5.50 m long, 2 m wide and 4.50 m high. Both chambers have a bench 1.25 m wide and 0.74 m high which was added to their rear walls. The space between the bench and frontal wall of the chambers is 0.75 m. There was a step 0.30 m high which led from the platform summit to the interior of both the above-mentioned chambers. Chamber 3, located on the northern facade of Structure Y, was excavated in 2004 and its dimensions are well known. It is 4.20 m long, 2.30 m wide and 4.30 m high (from the floor till the capstones). A bench 4.20 m long, 1.30 m wide and 0.80 m high extends along the rear wall of Chamber 3. The doorway which leads to Chamber 3 is 2 m wide with jambs 1.85 m thick. Chamber 1 is also located on the northern facade of Structure Y and it was only partly excavated in 2004. Excavations realized in the interior of Chamber 1 revealed that it is 4.20 m long

and 2.05 m wide. It is assumed that other chambers located on the northern and southern facades of Structure Y that have not been excavated so far have dimensions very similar to those of Chambers 1 and 3. It should be also mentioned that the interiors of all the chambers of Structure Y were painted black (Calderón et al. 2004: 62–67).

During the second construction stage (Y-1a), the paving of Patio 6 (Floor 1) resulted in the reduction of the height of the Structure Y platform from 1.90 to 1.80–1.75 m. The same architectural stage saw the construction of a second stairway on the southern facade of Structure Y. The new stairway was 6.70 m wide and it most probably consisted of five steps (Calderón et al. 2004: 67).

Structure 65

Structure 65 is located on the eastern side of Patio 6. Two architectural stages of that building, both dating to the Terminal Classic period, were distinguishable during excavations. During the first stage (65-1), a rectangular building was constructed on Floor 1 of Patio 6. It measured 24.75 (N-S) x 6.60 m (E-W) and consisted of two rooms, each being accessible from the western facade. A platform 0.45 m high, 24 m long, and between 2.40 and 2.15 m wide stretched in front of the main or west facade of the structure and connected the area of Patio 6 to the interior of both rooms. Access to the southern room (Room 1) was by a 1.60 m wide doorway and its jambs were 1.05 m wide. Room 1 was 13 m long (N-S) and 2.10 m wide (E-W). It was separated from Room 2 by a wall 0.93 m thick. Room 2 was 9.20 m (N-S) long and 2.50 m (E-W) wide. The exact location of the access to Room 2 is not well known due to remodelling and changes in the shape and form of Room 2 which took place during the next architectural stage. However, it is assumed that doorway of Room 2 was probably located 7.50 m north from the doorway of Room 1. It was approximately 1.10 m wide with jambs 1 m thick.

During the second architectural stage, Structure 65 was enlarged to the west and north. It now had 7 rooms and a L-shaped plan. Structure 65 had an access that was located on its western facade and led to Room 1 of the new architectural stage. Room 1 measures 12.90 m (N-S) x 2.10 m (E-W). Its doorway is 7.80 m wide with jambs 1.25 m wide. Room 2 is actually Room 1 of the first architectural stage and it was not modified. Its measurements were still the same: 13 m (N-S) x 2.10 m (E-W). In the area of Room 2 from the first architectural stage and between the north-western corner of Structure 65 and Structure 64, five new rooms were constructed which, except of Room 7, were all interconnected. Room 3 measures 2.20 (N-S) x 2.45 (E-W). It was accessible from the side of Room 1 by a doorway 1.08 m wide with jambs 1 m thick. Room 3 was connected from the north with Room 4. The floors of Rooms 4-7 were elevated between 0.25 and 0.30 m above the floor level of Rooms 1, 2 and 3. Room 4 measures 2.20 (N-S) x 2.50 (E-W) and it was accessible from Room 1 by a small step and a doorway 1.30 m wide. The eastern jamb of the doorway was 1.30 m thick and its western limit constituted the eastern wall of Room 5. Room 4 was connected from the west with Room 5 by a doorway which is 1.10 m wide with jambs 1.00 m thick. Room 5 measures 3.60 m (N-S) x 3 m (E-W). In its northern wall there is a doorway 0.90 m wide with jambs 0.85 m thick that leads to Room 6. Room 6 was constructed on an E-W axis. It is 9.85 m long and between 2.50 (eastern wall) and 2.30 (western wall) m wide. The last room (no. 7) is situated south of Room 6 and west of Room 5. It measures 3.50 (N-S) x 2.45 (E-W) m.

Unfortunately, during excavations it was impossible to find the access that led to that room (Calderón et al. 2003).

Structure 63

Structure 63 is located on the western side of Patio 6. It was constructed on Floor 1 of Patio 6. Two architectural stages of that building, both dating to the Terminal Classic period were distinguishable during excavations. The second stage was architecturally insignificant and was mainly remodelling in character.

A rectangular structure with 5 rooms was constructed during the first architectural stage (Fig. 35). It measured 19.35 (N-S) x 8.50 m (E-W). The walls of the interior part of the building discovered during excavations were approximately 1.50 m high but it is assumed that they were originally between 1.80 and 2 m high and that the roof of the building was constructed from perishable materials. Structure 63 has two accesses, one located on the northern side and another on the eastern side of the structure. The eastern access is 5.15 m wide with jambs 1 m thick. It leads to Room 1 which is 13.60 m (N-S) long and 2 m (E-W) wide. On the western wall of Room 1 there was a doorway 1.60 m wide with jambs 1.35 thick that led to three connected rooms (nos. 2-4) which were separated by two walls. The central room (no. 3) measures 4.55 (N-S) x 2.45 (E-W). In the south-western corner of Room 3 there is a doorway 0.85 m wide. The eastern jamb of the doorway is 0.80 m thick and its western limit constitutes the western (interior) wall of Structure 63. This doorway leads to Room no. 2 which measures 3.38 (N-S) x 2.40 (E-W). In the north-western corner of Room 3 there is another doorway 0.80 m wide. Its eastern jamb is 0.75 m thick and the western limit of the doorway constitutes the western (interior) wall of Structure 63. This doorway led to Room 4 which measures 2.40 (N-S) x 2.45 (E-W).

In the north-western corner of Room 1, there is a small corridor 3.70 m long and 0.75 m wide that leads to a doorway 0.95 m wide with jambs 0.95 m thick that gave way to the interior space of Room 5. Room 5 measures 5.75 (E-W) x 2.50 (N-S). On its northern wall, there was another doorway 1.35 m wide with jambs 1.10 m (eastern jamb) and 1.15 (western jamb) thick.

During the second architectural stage (63-1a), we can see one remodelling effort which involved changing the main or eastern access that led to the interior space of Structure 63. In the central part of this access, a wall was constructed but it is now in an advanced state of decay. Due to the construction of this wall, two new doorways were created: the northern one was 2.40 m wide and the southern access was 1.38 m wide. Both doorways led to Room 1 of Structure 63 (Calderón et al. 2003).

Structure 63A

Structure 63A is located in the north-western corner of Patio 6, 3.30 m north of Structure 63. The building consists of two rooms and measures 7.80 (E-W) x 4.57 (N-S) m (Fig. 35). Excavations carried out in the interior space of Structure 63A yielded many vault stones indicating that the roof of this building had a corbelled vault made of stone. Access to the structure is located at its southern facade which has two stone pillars measuring 0.60 x 0.80 m (Fig. 86). A platform 7.80 m long, 0.45 m wide and

0.33 m high stretches in front of the southern facade and it leads to three accesses for Structure 63A. The central access is 1.55 m wide while the eastern and western accesses are 1.15 m wide. The southern room of Structure 63A is 6.15 m long (E-W) and 1.55 m wide (N-S). On the northern side of this room, a step 0.11 m high leads to a doorway 1.15 m wide with jambs 0.95 m thick. The doorway gives way to the northern room of Structure 63A which is approximately 6.15 m long (E-W) and 1.20 m wide (N-S). In the eastern part of this room there is a bench 1.90 m long, 1.20 m wide and 0.64 m high. A similar bench once existed in the western part of the same room. Another bench 2.60 m long, 0.60 m wide and 0.32 m high stretches along the northern wall of the northern room. It is hard to state what the exact shape and form of the northern room of Structure 63A was because its northern part was heavily destroyed due to the collapse of the northern portion of the Interior Acropolis platform (Calderón et al. 2003). According to Damien Bazy (who excavated this building), Structure 63A had two construction stages. During the first stage it had the above-mentioned shape and dimensions. During the second stage, a bench was added to the northern wall of the northern room of Structure 63A (Bazy 2004: 37). Its dimensions were given above.

It must be stressed that Structure 63A with two rooms (where the second room is located directly behind the first and is accessed from the front room through one doorway) and stone pillars on its facade is an example of the so called “tandem plan” structure which is very typical for the Postclassic period architecture (Freidel 1981; D. Rice 1986: 309). Tandem plan structures are also present in the Terminal Classic at Chichen Itza.

Structure 64

Structure 64 is located at the northern side of Patio 6. During excavations, two architectural stages of that structure (64-1 and 64-1a), both dating to the Terminal Classic period were distinguishable (Calderón et al. 2003).

During the first architectural stage (64-1), a building 18.25 (E-W) long and 7.70 m (N-S) wide was constructed on the first floor of Patio 6. The exterior walls of Structure 64 are now approximately 1.40 m high. They were probably a little higher but the roof of this building was made of perishable materials as there were no vault stones found inside.

Structure 64-1 consisted of two rooms, southern and northern. The southern room is 15.90 m long (E-W) and 2 m wide (N-S). A small step 0.35 m high led from the area of Patio 6 to the interior part of Structure 64. Structure 64 had three doorways in its southern side (Fig. 35). The central doorway was approximately 2.20 m wide with jambs 1.20 m thick. The eastern and western doorways were 1.95 m wide with jambs 1.20 thick. The northern wall of the southern room has 5 openings which led to the north room. The dimensions of the openings are as follows: the western most opening is 1 m wide, its eastern jamb is 1.20 m thick. The western limit of this opening constitutes the western interior wall of Structure 64. The second opening is located 3.65 m east from the first one, it is 0.95 m wide with jambs 1.25 m thick. The third and central opening is 2.30 m wide with jambs 1.30 m thick. The fourth opening is located 1.20 m east from the central one, it is 1 m wide with jambs 1.30 m thick. Finally, the last and fifth opening is located 3.60 m east from the fourth access. It is 1 m wide. Its western jamb is 1.20 m thick and the eastern limit constitutes the eastern interior wall of Structure 64. In sum,

the two central openings between both rooms of Structure 64 form two pillars. The north room of Structure 64 is 16 m long (E-W) and 1.90 m wide (N-S). The northern facade of Structure 64 has the remnants of four pillars. The space between these pillars formed five accesses which are (from west to east) respectively, 1.90, 1.20, 2.20, 1.20 and 1.90 m wide. The jambs of all accesses are 1.20 m thick.

There are no major changes seen in Structure 64 during the second architectural stage. This stage is related to the construction of a wall which at the time of the excavations was 2.70 m long, 0.60 m wide and 0.80 m high. The wall was built close to the north-western corner of Structure 64. This wall was originally higher and blocked communication between the northern part of Structure 63 and Structure 63 A. During this stage, access from this area to the northern facade of Structure 64 and to the stairway of the Interior Acropolis was closed and access to the area of Patio 6 from outside was possible only through Structure 64, which probably served as a control point for entry.

Patio 6 was excavated in 2003 by Damien Bazy with substantial support and guidance from Zoila Calderón. Bazy divided the area with excavated structures (nos. 65, 64, 63 and 63 A) into horizontal lots and his investigation was very methodical and careful. Subsequently Bazy analyzed all archaeological material excavated from these structures as part of his Masters thesis. In Structures 63, 64 and 65 clearly dominated sherds from the Cambio and Tinaja Groups. Among the ceramics that were analyzed, the *ollas* and bowls of large diameter prevailed. These vessels were most probably used to prepare and store food. Moreover, many chipped stone artefacts (flakes, bifacial axes, scrapers, knives, cores and others) nodules and stone tools (mainly fragments of *manos*, *metates* and complete polishing tools) were found inside these buildings. Structure 63A stands out from the other constructions of Patio 6. It had a corbelled vault while the roofs and upper parts of the walls of Structures 63, 64 and 65 were made from perishable materials. The highest percentage of polychrome ceramics among excavated structures of Patio 6 was found inside Structure 63A (53.3%, mainly of Zacatel and Botifela Groups). One sherd of Fine Orange Class (and the unique⁹ among the all excavated structures of this area) was also found here (Sahcaba Moulded-carved). Dishes are the dominant vessel forms discovered here. Moreover, in Structure 63A only four chipped stone artefacts and no stone tools were discovered (Bazy 2004).

According to Bazy, Structure 63A might have had a public function (*oratorio*) (Bazy 2004) although a residential function is also possible. Structures 65 and 63 most probably functioned as the living and working quarters for the people attending the ruler and his family who resided at the adjoining Structure Y. Structure 64 seems to have had various functions. It probably served as a control point but archaeological materials discovered inside of it indicate that domestic activities took place here as well.

Structure Z

Structure Z is one of three constructions in Nakum that consists of two floors (the other buildings being Structures G and N/60/61). It is located on the western side of Patio 7 and was constructed on the eastern facade of the Interior Acropolis platform.

Excavations carried out in several chambers of the palace, in front of its main facade and on the northern limit of Structure Z, indicate that this building was constructed entirely during the Terminal Classic period. Both floors of this building have a rectangular

plan and measure thus: lower floor, 45.40 m (N-S) x 4.60-3.35 m (E-W); upper floor, 40 m (N-S) x 6.50 m (E-W). The rear walls of the chambers located on the lower floor were constructed on the walls of the Interior Acropolis platform. They were set up on a small platform 1.25 m high. This platform could be reached from the area of Patio 7 by two stairways. The first stairway is located in front of Chamber 4 and it is 3.94 m wide and 1.30 m long. This stairway is not well preserved but it is assumed that it consisted of four steps. The second stairway is located in front of Chamber 6 and it is 4 m wide and between 1.40 and 1.50 m long. Most probably, it too consisted of four steps. The platform of Structure Z also functioned as a passageway to reach the doorways of all the chambers of the first floor. Seven chambers were located on the lower floor. Their dimensions are given in Table 11 (Chapter IV). A single step connected the interior space of the chambers with the level of the platform. In chamber nos. 3 and 6, vestiges of benches that covered all the interior space and that were 0.45 m high were discovered. It is assumed that Chambers 1, 2, 4 and 5 had a similar bench (Calderón and Toraya 2002: 94, Calderón et al. 2004: 72). Chamber 7 has a bench which occupies its southern part only (it is 1.85 m long x 1.55 m wide x 0.33 m high). Six chambers were constructed on the second floor of Structure Z (Fig. 87). One chamber (Chamber 4) excavated on this floor may provide us with information about the dimensions of the other unexcavated chambers of the same tier. The chamber measures approximately 6.32 m (N-S) x 1.76 m (E-W) and is 3.90 m high. A bench 1.20 m wide and 0.51 m high was added to the rear wall of the chamber. There was also free space (0.56 m) in front of the bench of the chamber. The other chambers on the second floor probably had very similar dimensions.

During the second architectural stage of Structure Z (Z-1a), small scale remodelling is observed. The southern stairway of Structure Z (located in front of Chamber 6) was rebuilt. It was enlarged by 1.10 m to the south. Due to this remodelling the southern stairway became 5.10 m wide.

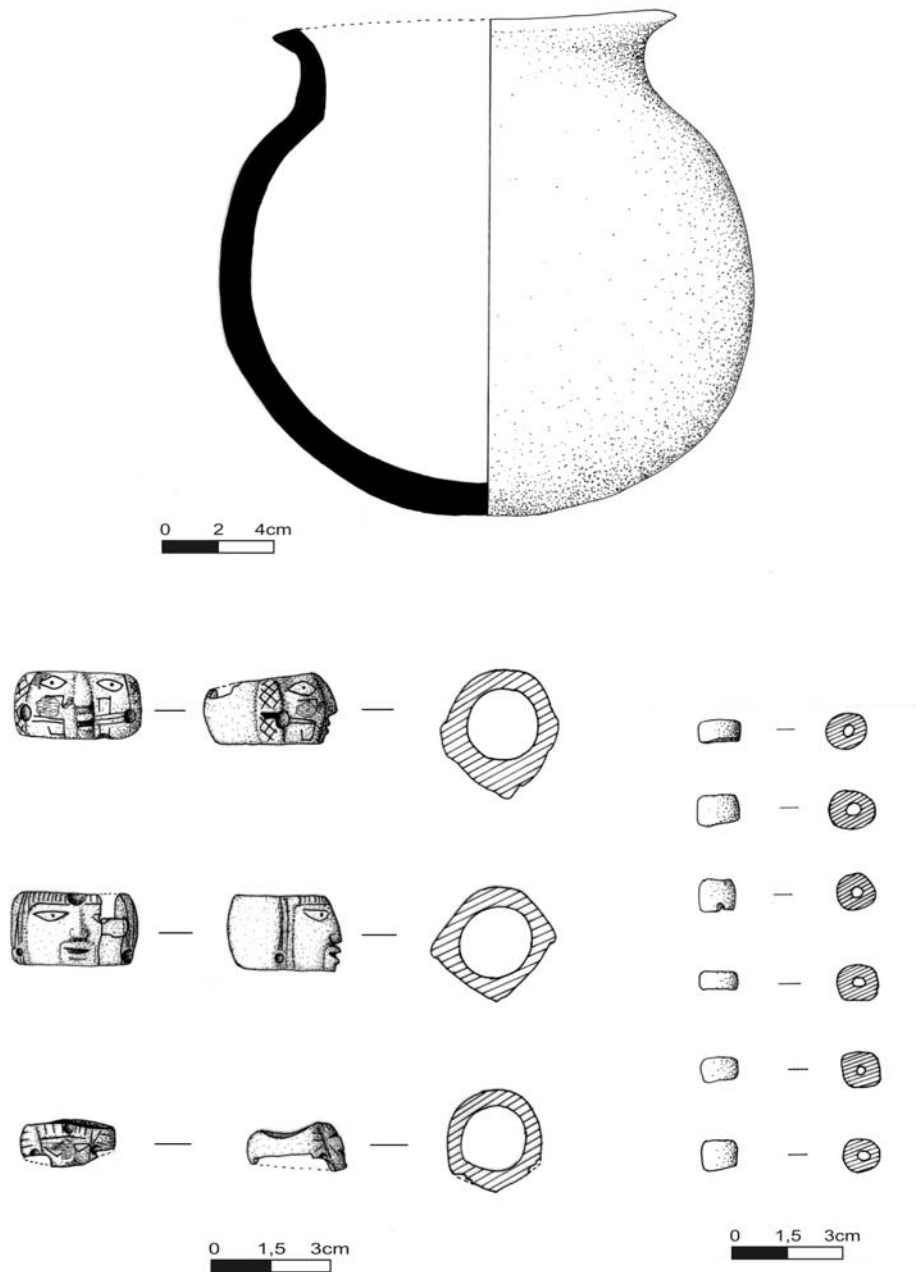
During the same architectural stage a small platform measuring 3.50 (E-W) x 2.70 (N-S) x 0.60 m high was added to the platform of Structure Z in front of Chambers 4 and 5. Its exact function is unknown (Calderón et al. 2004: 73).

Investigations carried out in the area of Structure Z resulted in the discovery of many artefacts related with daily life of local elites (*manos*, *metates* [complete as well as fragmented]), stone axes, worked sherds, shells; among the vessels there were mainly found utilitarian vessels of Cambio Unslipped type, as well as of Tinaja Group). Many artefacts of ceremonial use were also found (fragments of incense burners, many complete or incomplete figurines) as well as a significant number of moulded-carved ceramics.

Structure 62

This structure was set up on the final floor of Patio 7, between Structure 24 and the northern end of Structure Z. The western end of Structure 62 partly covered the Structure Z platform. Based on archaeological material from the fill of Structure 62 and from its stratigraphic location we know that this building was built entirely during the Terminal Classic period and that it is of a later date than Structure Z.

Structure 62 is in the form of a rectangular, one-chamber building which measures 6.50 m (E-W) x 3.63 m (N-S) and surmounts a small platform 0.34 m high. The platform functioned as a step which connected the area of Patio 7 with Structure 62. The interior



36. Drawing of PAN Offering 4 which consisted of an *olla* of Cambio Unslipped type, along with three rings and six beads found inside this vessel (drawing by K. Radnicka, the Nakum Archaeological Project)

part of this building had a bench 5.80 m long, 2.10 m wide and 0.50 m high. The doorway of Structure 62 was 1.80 wide and its jambs were 0.70 m thick. The walls of Structure 62 were almost completely destroyed but during excavations worked stones typical of vault construction were discovered (Calderón and Toraya 2002: 116). This indicates that Structure 62 had a corbelled vault. Between Structures 62 and 24 there is a stairway 3.30 m wide that consists of 8 steps and leads from the area of Patio 7 to Structure 25, which was unfortunately not excavated (Calderón and Toraya 2002).

Other structures

Limited investigations in the eastern side of Patio 1 indicate that the last architectural stage of Structures 14 and 15 can be also dated to the Terminal Classic period. During the 2006 season, the Nakum Archaeological Project excavated one test pit at the top of Structure 15. During excavations stone foundations of a superstructure which must have been constructed from perishable material was discovered. Below it several rows of stones which were part of another, older structure were found. The archaeological material recovered during investigations indicate that the above-mentioned constructions can be dated to the Terminal Classic period. Moreover, at a depth of 0.17 m below the surface in the eastern profile of the test pit, a vessel of Cambio Unslipped type was found (Offering 4 according to the numbering system used by the Nakum Archaeological Project). The vessel contained 3 shell rings on which representations of human faces were incised, as well as 6 shell beads and fragmented bones (Figs 36 and 97). It is possible that this offering is related with a royal tomb from the Tepeu 1-2 transition that was discovered in the same test pit at the depth of 1.75 m below the surface.

Another Terminal Classic offering discovered by the Nakum Archaeological Project consisted of a small bowl of Tinaja Red type (Fig. 96) and a human bone (femur) that were excavated in a test-pit opened between Structures 15 and 14.

Structure 13 (located south of Structure 15) has been recently partly excavated and reconstructed by the Triangulo Project. This research indicates that Structure 13 consisted of 4 chambers and it closed Patio 9 from the west limiting access to the neighbouring Structure G as well as to the Interior Acropolis from the east side. Materials recovered during excavation of Structure 13 indicate the presence of at least two architectural stages, both dating to the Terminal Classic period.

Another construction which most probably is also of Terminal Classic date is Structure T, enclosing the area of Patio 10 from the east. Structure T consists of eight chambers, four located on its western side and the same number on the eastern side. Limited excavations by Zoila Calderón in 2005 at the southern end of this construction, close to Structure S, indicate that it was constructed during the Terminal Classic. However, in my opinion it is possible that this construction has at least one Late Classic architectural stage. More detailed excavations of Structure T are needed to resolve the problem of dating the structure accurately.

5.2. Terminal Classic burials and offerings

With regard to the internments, more than twenty burials discovered in Nakum are dated to the Terminal Classic (Triangulo Project burials nos. 1, 2, 4–6, 11, 12, 15–18,

Table 5. A list of Terminal Classic burials discovered at Nakum (it includes interments discovered up to 2004¹)

No.	Location	No. of bodies	Sex	Age	Condition	Position	Furniture	Comments
1	south of Structure F, at the base of the lowest step of the stairway leading to this construction. Burial 1 was found below Floor 1 which was destroyed due to the construction of a cist 1.30 m long, 0.80 m wide and 0.80 m high where a body was laid. It was oriented on a N-S axis, at the depth of 2.45 to 3 m below the level of Floor 1. The cist was constructed with cut stones which were approximately 0.25 long and 0.10 m thick (Hermes and García 1998: 125). After the burial was deposited, the cist was covered with rubble up to the level of Floor 1	1	M	29-32	skull in bad condition, it was laid between the pelvis and ribs; scars and fractures seen on the atlas may be traces of decapitation	supine, head south	two miniature vessels laid below the level of the pelvis, one bone awl 0.17 m long and many flint flakes. First vessel (NKM004) is a tripod bowl and the second (NKM005), a tripod olla (Fig. 38). Although, in case of both forms, exact ceramic complex and type are undetermined, the vessels are from the Terminal Classic period (Hermes and García 1998: 200)	
2	0.18 m north of the northern side of the stone roof of Structure 60-1 and 1.75 m north of the doorway of Building 60-2 (Hermes et al. 1999). The burial was deposited in the construction fill during the seventh architectural stage of Structure N/60/61	2	M	20-34	skeletons were discovered in relatively good state of preservation but were heavily destroyed by hurricane Mitch during their exploration in 1998	Individual A – flexed, right side, head north; Individual B – flexed, right side, head north	none	many sherds found in the layer of the burial and above it (in the construction fill) were from the Terminal Classic period

¹ In 2005 more Terminal Classic burials were discovered during investigations of the Triangulo Project. These burials were found in the following buildings: Structure N (Burial 29 [multiple burial]), Structure Q (Burial 30 [two adult males] and Burial 32 [adult male]) and Structure 13 (Burial 33 [adult male] and Burial 34 [child 6-7 years old]) (Matute 2005).

3	inside Chamber 61-1, Structure N/60/61; burial was located in a layer consisting of soil and loose stones from the fallen eastern wall of the chamber. The layer of this rubble continued to a depth of 0.50 m below the level of the capstones (Hermes et al. 1999).	1	?	?	poor	all bones were dispersed and mixed with the rubble of a fallen wall	none	Hermes (2004) supposes that the burial can be dated to either the Late or Terminal Classic period. The layer of rubble (Lot 1) in which Burial 3 was found was full of sherds from the Terminal Classic. Other sherds belonging to Lots 2 and 3 were from the same period and were found accumulated below the burial, on the floor of the chamber. However, it is also possible that the burial was dug into the rubble of the fallen chamber during the Postclassic, although no material from this period was found.
4	it was discovered in the construction fill of the stairway block built during the Terminal Classic period (seventh architectural stage) in the centre of the main stairway of Structure N/60/61 (Hermes and Calderón 2000: 53)	2	Individual A: male, Individual B: undetermined	adults	Individual A: only lower parts of skeleton survived; the skeleton of Individual B is in better condition	Individual A: probably flexed, right side, with legs oriented to the north-east; Individual B: supine, head south	one vessel (NKMC 019) was found close to the Individual A. It is a tripod plate of Tinaja Red type (Hermes and Calderón 2000: 166)	

5	discovered in the centre of Patio 16 during the test pitting programme carried out in the periphery of Nakum. Burial was laid at the base of a wall belonging to some kind of structure which was not excavated (Fig. 39).	1	M	21-22	very good, the individual had traces of trepanation in his skull	Flexed, left side, head west	two vessels: tripod bowl (NKM 014) of Azote Incised type and a barrel with tall ring base of Pabellon Moulded-carved type with beautifully modeled figural scene (NKM 015) (Fig. 95). Among other goods deposited in the burial were 37 caracoles that were once part of a necklace, 17 fragments of greenstone, one pendant from alabaster and one piece of worked bone (Hermes et al. 1999; Hermes, Zalka and Calderón 2005)	all 6 layers distinguishable during excavations of Chultun 4 provided pure Terminal Classic sherds, including the lowest layer where Burial 6 was found. Chultun 4 is connected by a small channel with Chultun 6 which is located 2.70 m to the south and has a bell-shaped form, typical for the Terminal Classic period (see the section: Nakum peripheries and chultuns). All data seems to indicate that both chultuns were constructed during the Terminal Classic period
6	northwestern corner of Chultun 4. The deceased individual was laid on the floor of the chultun, 2.50 m below the level of the chultun mouth (Fig. 46a) (Hermes et al. 1999: 142)	1	?	15.5	poor	?	none	

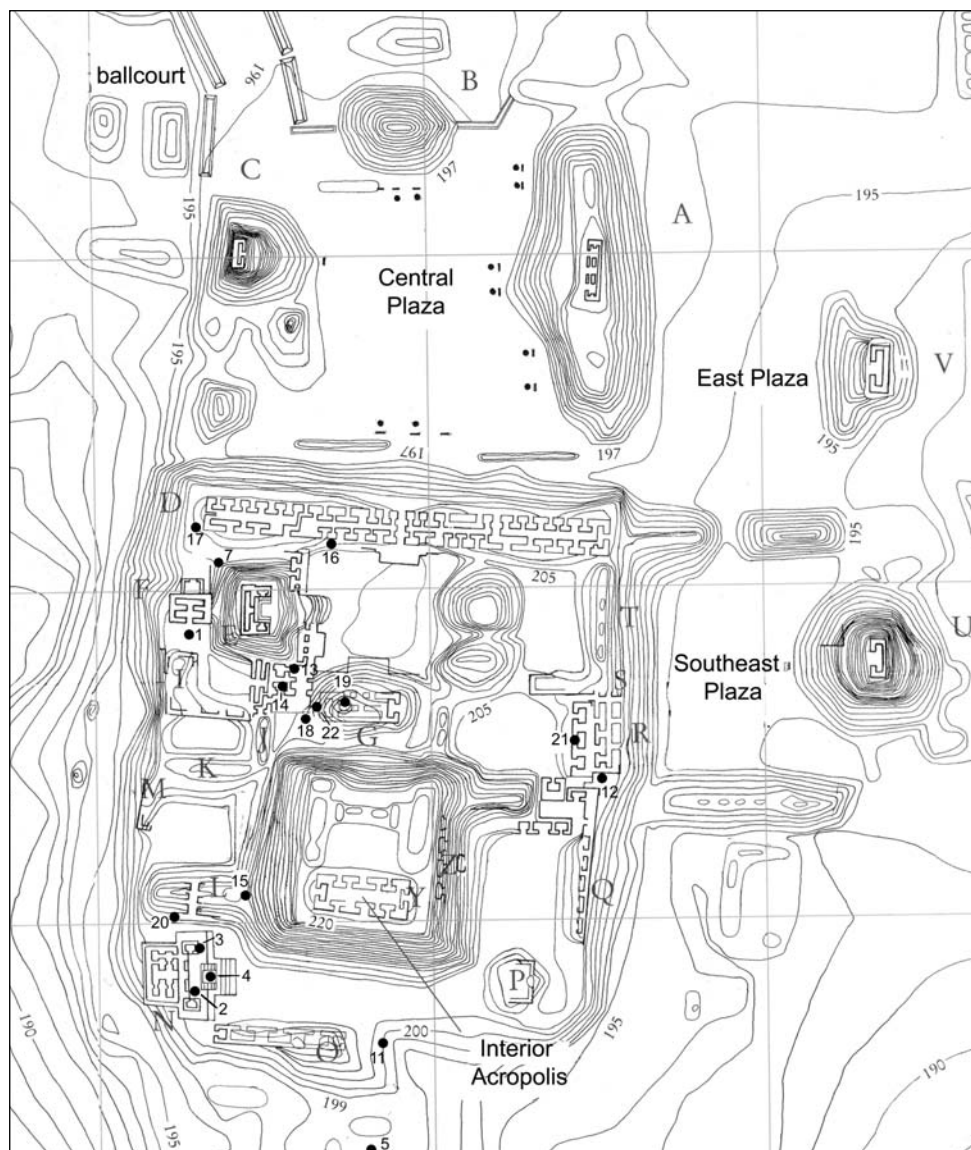
7	close to the north-western corner of Structure E platform, below Floor 2 detected in Suboperation 19 (Hermes et al. 1999).	1	?	3 years old (± 12 months)	poor	?	none	sherds recovered from the layer in which Burial 7 was discovered indicate that it can be dated to either the Late or Terminal Classic period (Hermes et al. 1999)
11	the deceased person was deposited in a small pit cut into the southern wall of the South Acropolis platform, 10 m east from the eastern facade of Structure O (Fig. 37) (Hermes and Calderón 2000: 146; Figs. 124, 125)	1	F (?)	adult	good	flexed, left side, head south	none	all sherds that were discovered in the context of the burial, as well as those that came from the layers above it were dated to the Terminal Classic
12	area between Structures R and Q; 7 m west of the southeastern corner of Structure R (Fig. 37). Burial was cut into the Floor 1; it was found in a layer of ash related with the Terminal Classic activity in Nakum (Hermes and Calderón 2000: 97)	1	M	+21	good	flexed, left side, head west	none	all the material found in the layer where Burial 12 was localized, material discovered above it as well as material related with Floor 1 are from the Terminal Classic period
13	in the place where the eastern wall of Chamber 3 of Structure H connects with the southern wall of Structure E; the burial was laid 0.10 m below the level of Floor 1 which extends between Structure H and the southern end of Structure E (Hermes and Calderón 2000: 154, Calderón – personal communication 2003)	1	?	adult	very poor, only a few fragments of the lower part of the skeleton survived	?	none	sherds found above Floor 1 were dated to the Terminal Classic period. Other sherds found below Floor 1 were of Terminal Classic as well as Late Preclassic date. Hermes (2004) assumes that Burial 13 is either of the Late or Terminal Classic date

14	the deceased was laid on the eastern end of the bench of Chamber 4, Structure H (Hermes and Calderón 2000: 153)	1	F	~26	very good	supine, head north	none	dating of this burial is problematical. On the other end of the bench an offering (Offering no. 16) was found; it consisted, amongst others, of a vessel (NKM 032) dated to either the Terminal Classic or Late Postclassic period. Other ceramic materials found inside the chamber were from the Terminal Classic. According to Bernard Hermes (2004: 35) the burial is either from the Terminal Classic or Postclassic period
15	narrow space between the eastern facade of Structure L and the western wall of the Interior Acropolis; the burial was discovered above a stuccoed floor of Patio 4, at a depth of 3.60 m below the present level of terrain and 2.50 m north of the southeastern corner of Structure L (Fig. 40) (Hermes et al. 2001: 130)	1	M	32	very good	flexed, right side, head south, legs crossed	a few burned sherds, fragmentation of a shell and bone awl were discovered in the area of the dead person's feet	sherds found in the layer where burial was discovered, others found below the stuccoed floor and above the level of the burial are all from the Terminal Classic (Hermes et al. 2001: 129-130). Position of the skeleton may indicate that the deceased individual had tied limbs at the moment of death
16	discovered in a fill of the platform of Structure D; 2.10 m east of the lowest step of the stairway linking Patio 1 with Patio 12 (Fig. 37). The burial was probably connected with D-2 architectural stage	1	M	34-42	poor	?	4 stone beads	

17	area close to the western facade of Structure D; the burial was discovered 4 m west of the southwestern corner of Structure D and 3.15 m below the surface (Fig. 37) (Hermes et al. 2001: 63, 64)	1	M	~29	good	flexed, side, north	left head	none	ceramic fragments found close to the dead as well as other sherds found nearby are all dated to the Terminal Classic period (Hermes et al. 2001: 63, 64)
18	area between Structures G, H, J and the Interior Acropolis; the burial was discovered on the floor of Room 1, beside its eastern wall, 2.28 m below the level of the surface (Calderón and Toraya 2002: 100) (Fig. 25b)	1	?	2 years old (\pm 8 months)	good	flexed, side, east	left head	close to the dead there were found 28 sherds and a fragment of a stone knife	ceramic fragments found close to the dead as well as other sherds found nearby are all dated to the Terminal Classic period (Calderón – personal communication 2003)
19	western end of the northern chamber of Structure G; burial was discovered approximately 5 cm above the chamber floor at the level containing stones from the fallen vault (Calderón and Toraya 2002: 63; Calderón – personal communication 2003)	1	?	5 years old (\pm 19 months)	poor	flexed, side, south	right head	none	although archaeological material found in all the rubble layers above the burial comes from the Terminal Classic, the exact dating of this burial is not known. Most probably it is of Terminal Classic or Postclassic date
20	3 m west from the southwestern corner of a doorway that led to the interior of Chamber 5 of Structure L. The burial was found in the fill of the platform of Structure L between 0.50 and 0.70 m below the present level of the surface.	1	?	3-4	poor	?	?	none	sherds collected from two layers distinguished above the burial as well as from the level in which the burial was found are from the Terminal Classic period (Toraya and Calderón 2002: 79, Calderón – personal communication, 2004)

21	Chamber 2 of Structure R; between the jambs of Chamber 2, a small pit measuring between 0.88 and 0.95 m in diameter and 0.77 m deep was cut out into the floor and subsequently the body was deposited (Calderón et al. 2003: 9)	1	M	~61	good		seated position	two vessels (NKMC 057 and 058). The first vessel (NKMC 057) is an olla which was covered by a bowl (NKMC 058) (Fig. 41 a-b). Both vessels belong to the Cambio Unslipped type (Hermes 2004: 14)	
22	Structure G; a pit 1x0.80 m in diameter and 0.44 m deep was cut out into the floor of the terrace that stretched in front of the western chamber of Structure G. The deceased was laid inside the pit (Calderón et al. 2003: 26)	1	M	12 years old (± 30 months)	good		flexed, right side, head west	1 vessel, dish of plain base of Tinaja Red type (NKMC 061), deposited close to the skull; 8 figurines, six of them were laid close to the ribs and long bones of the left arm, two others were laid close to the skull (Hermes 2004: 15)	
23	found at the base of the southern wall of the eastern facade of Structure N (Matute 2003)	1	M	~32	good		flexed, left side, head east	none	
23A	discovered north of the frieze embellishing the upper part of the northern wall of Chamber 60-1 of Structure N/60/61	2 or 3	Individual A: M, Individuals B and C: ?	Individual A: 25-35; Individual B: ?; Individual C: infant	Individual A: good; Individual B: poor; Individual C: poor	Individual A: undetermined, vestiges of the skeletons belonging to 2 or 3 individuals were found mixed (Matute 2003: 163)	15 shell beads and one spherical bead from greenstone	Burial 23-23A was discovered by building workers during the restoration work carried out in the area of Structure N/60/61. It is possible that Burial 23A is actually Burial 2 which was not completely excavated in 1998 due to bad weather and subsequently sealed in 1999. In 2003, building workers came across this burial	

24	burial was discovered in the plaza of Patio 52, below the Floor 1, between 0.46 and 0.56 m below the surface (Calderón et al. 2003: 157, 158)	1	?	4 years old child (+-12 months)	poor	supine, head northwest	none	all archaeological material recovered in two layers above the burial as well as in the layer where the burial was found is dated to the Terminal Classic period
PAN-E3	superstructure located at the summit of Structure 99, on the floor of the eastern side of Room 2	1	?	?	poor	supine, head northeast (?)	none	most probably the remains discovered belong to some individual who was left unburied or only partly covered by soil in Room 2



37. Map of the Central and South Sectors of the site with location of all Terminal Classic burials discovered (map after Quintana and Wurster 2002 with corrections made by the author)

20–24, 29, 30, 32–34, the Nakum Archaeological Project burial no. PANE-3); five others (Triangulo Project burials nos. 3, 7, 13, 14 and 19) may also date to that period (Fig. 37 and Table 5). Most of them were located within the boundaries of buildings, under their floors, in the construction fill of platforms or under the floors of courtyards. Such locations point to the fact that at least some of these burials were dedicated during enlargement or rebuilding of architectural constructions and dedication of their new versions,

presumably during special religious and political ceremonies. It is conceivable that some of the burials represent people who had been sacrificed. One of the burials (no. 1) was situated under the stucco floor of the courtyard that stretches in front of Structure F. The skull of the deceased was placed between the pelvis and the ribs and visible marks on the atlas pointed to the fact that the person buried in the grave had been beheaded (Hermes and García 1998: 125, 200). A few burials were placed on the floors or in the debris of collapsed structures. They may be connected with post-constructional activity at the site. The richest burials were grave nos. 1 (two vessels, bone awl, flint flakes), 4 (one vessel), 5 (two vessels, greenstone, alabaster, necklace from caracols, worked bone), 21 (two vessels) and 22 (one vessel and eight figurines). The deceased buried in graves 15 (few burned sherds, shell, bone awl), 16 (four stone beads) and 18 (28 fragments of a vessel, fragment of a stone knife) were equipped more modestly. The rest of the burials were not equipped at all. Some of the rich burials discovered under the floors of chambers in palace buildings (Burials 21 and 22) may have belonged to the elite representatives residing in those structures.

More than 30 offerings have been discovered in Nakum so far, half of them (Triangulo Project offerings nos. 2, 6, 7, 10, 12, 14, 16, 19–23, 27, 29, 30, 31 and the Nakum Archaeological Project offerings nos. PANO-2 and PANO-4) dating to the Terminal Classic (Table 6). Two others (Triangulo Project offering nos. 8 and 9) may also date to that period. Terminal Classic offerings consisted mainly of vessels and, just as burials, were mainly deposited under the floors, in the construction fill, in chultuns and on the floors. Among the vessels that can be found in the offerings, the dominating types are Cambio Unslipped (Offerings nos. 6, 9, 12, 21, 27 and PANO-4) and Tinaja Red (Offerings nos. 7, 14?, 23, 29, 30 and PANO-2). The remaining offerings consist of vessels of the following types: Maquina Brown (Offering 19), Camaron Incised (Offering 10), Zacatel Cream Polychrome (Offering 23), Azote Orange and Botifela Orange (Offering 9). The ceramic type was indeterminable for some vessels. One offering (no. 31) consisted of a concentration of flint and obsidian flakes and tools as well as of some Terminal Classic sherds. It was part of a termination ritual that was documented in Structure 12A.

5.3. Nakum peripheries and chultuns

In the area known as the Triangulo Park, Nakum is the only site that has been thoroughly investigated, both at its extensive periphery and also at its central part which contains monumental architecture. Before we start to analyze the results of the research carried out at the peripheries of Nakum, it is necessary to provide some information concerning the methodology used during its investigation.

Investigations in the area of the Nakum peripheries were started in 2001 by Justyna Olko from Warsaw University and the author and were continued by the author in 2003. Only a small portion of that area had been mapped prior to 2001 (Tozzer 1913; Hellmuth 1975, 1992; Fialko 1996b, 2001). The peripheral survey of Nakum encompassed the areas to the north, east, and west of the monumental core where 6 transects were marked. The area to the south and in great part to the west is covered by the *bajo* seasonal swamps and alluvial terrain of the Río Holmul, which means that in these sectors the hypothetical settlement must have been concentrated at a certain distance from the centre of the site.

Table 6. A list of Terminal Classic offerings discovered at Nakum

No.	Location	Content	Comments
2	close to the eastern wall (exterior part) of the small room added to Structure F from the north during the Terminal Classic period	tripod bowl with hollow semi-cylindrical supports of Tinaja Red type (Hermes 2004)	
6	in the middle part of the stairway on the eastern side of the platform of Structure N/60/61. The offering was deposited between the wall of the 6-th construction stage and that of the 7-th construction stage. The stuccoed floor (no. 2) related with the 6-th construction stage was cut and below it, Offering 6 was deposited. Then, the offering as well as Floor 2 were covered with a fill and the next stuccoed floor (no. 1) was constructed above it. That floor was related with the 7-th construction stage (Hermes et al. 1999)	two ceramic vases (NKMC 017, 018) and one <i>metate</i> (NKML 025). Vessel NKMC 017 is a flat-bottomed bowl of the Tinaja Red type. Second vessel (NKMC 018) is a globular jar of the Cambio Unslipped type	
7	the offering was discovered 0.45 m below the surface, on the northern wall of the Merwin Group, 0.50 m east from the north-western corner of this complex	one ceramic vessel (NKMC 016) discovered in the upside down position on the wall of the Merwin Group. The vessel is a tripod bowl with semicylindrical supports of Tinaja Red type (Fig. 42a) (Hermes and Calderón 2000: 14)	
9	Chultun no. 7; the offering was discovered 0.20 m above the level of the chultun floor and 1.85 m below the chultun mouth	offering consists of 3 fragmented vessels (NKMC 021, 022, 023). Vessel 021 is a globular jar of the Azote Orange type (Fig. 421b); vessel 022 is a bowl with flat base of the Botifela Orange type (Figs. 42c); vessel 023 is a bowl of the Cambio Unslipped type (Fig. 41c)	
10	the offering was found fragmented and incomplete on the floor of the northwestern corner of the Chamber 7 added during the Terminal Classic period to the eastern part of the Building N	one ceramic vessel (NKMC 024) laid in an upside down position. It is a tripod dish with hollow and cylindrical supports of the Camarón Incised type (Fig. 42d)	
12	Chultun 22; the offering was laid at a depth of between 1.33 to 1.50 m below the surface	globular jar (complete in 85%) of Cambio Unslipped type (NKMC 027)	all the materials (including Offering 22 discovered inside Chultun no. 22) come from the Terminal Classic period. The form of the chultun is also typical for this time span (see: Nakum peripheries and chultuns)

14	Structure H; the offering was discovered on the floor beside the eastern wall of Chamber 3 (Hermes and Calderón 2000: 156)	globular jar (NKMC 031) of Tinaja Red type; the vessel is highly deteriorated but traces of a red slip survived on its surface (Fig. 41d)	
19	northeastern corner of Patio 1; the offering was found on the Floor 1 of the Patio 1 at the base of the platform of Structure D, 1.15 m below the surface (Hermes 2004: 12; Calderón and Toraya 2002: 41, 42)	fragment of vessel's neck with outcurved rim (NKMC 048) of Maquina Brown type (Hermes 2004: 12)	
20	the offering was found inside Room 1 of the area between Structures G, H, J and the Interior Acropolis. It was discovered in the rubble 1.96 m below the surface, beside the eastern wall of Room 1 which is also the western wall of the platform of Structure G (Calderón and Toraya 2002: 99, 100)	miniature vessel with outcurved rim	the vessel does not have a catalogue number and its ceramic type has not been determined. According to Hermes (2004: 31) it can be dated to the Terminal Classic period
21	the offering was found fragmented and incomplete in the northwest-ern corner of the north-central chamber (Chamber 5) of Structure L. The vessel was found 1.91 m below the level of the chamber soffit and approximately 0.60 m above the level of the chamber floor (Calderón and Toraya 2002: 77-78)	jar (NKMC 049) of Cambio Unslipped type (Hermes 2004: 12, 13)	
22	it was discovered in the fill of a bench or terrace extending in front of the western chamber of Structure G; 0.05 m west of the southern part of the exterior wall of the western chamber (Calderón et al. 2003: 26, fig. 25)	dish with convex base of Zacatel Cream Polychrome type (NKMC 062). It was found intentionally broken (Hermes 2004)	
23	western chamber of Structure G; an offering was deposited in a small pit which was cut out into the chamber floor, approximately 0.55 m north from the southern doorjamb and 0.75 m east from a step that leads to the interior space of the western chamber (Calderón et al. 2003: 28)	one vessel (NKMC 063), one maize cob (NKMV 041) and one fragment of burned bone. The vessel is a jar of Tinaja Red type (Fig. 41e)	
27	discovered in the rubble of the south-eastern corner of the small terrace added during the second construction stage to the southern wall of Structure 53 (Calderón et al. 2004: 76)	vessel neck 7 cm high with diameter of 27.5 cm (NKMC 069) of Cambio Unslipped type	
29	it was found 0.75 m south of the southern wall of Structure 53 and 5.20 m west of the north-western corner of a small terrace added to the southern wall of Structure 53 during the second construction stage (Calderón et al. 2004: 76).	vessel neck 5.5 cm high with diameter of 19 cm of Tinaja Red type (NKMC 071)	
30	it was found in an inverted position close to the southern facade of Structure S, 1.52 m south of the south-western corner of Structure S and 0.16 m above the level of Floor 1	globular olla 8.5 cm high of Tinaja Red type (NKMC 072)	

31	it was deposited on Floor 2, detected in Suboperation 10 in the area of the southern doorway of Structure 12A. The offering covered an area 1x0.85 m. The layer in which Offering 31 was discovered was 0.10 m thick (Calderón et al. 2004: 101-102)	concentration of flint and obsidian flakes and artefacts as well as some Terminal Classic sherds	deposition of Offering 31 was most probably part of termination ritual which included sealing and blocking of Structure 12A during the Terminal Classic; it seems that this termination took place just before the construction of neighbouring Structure 12
PANO-2	deposited above the floor of a narrow corridor located between Structures 14 and 15	small bowl of Tinaja Red type (Fig. 96) and human femur	
PANO-4	it was discovered at the top of Structure 15, 0.17 m below the surface and approximately 1.60 m above the royal tomb (Tomb 1) discovered in Structure 15	<i>olla</i> of Cambio Unslipped type covered with a small ceramic sherd. The vessel contained three shell rings with carved representations of human faces on the outer surface, as well as six shell beads and the remains of bones (Figs 36 and 97)	

In sum, the Nakum peripheries encompass 36 patio groups (nos. 15–18, 28–58) with 142 structures located in an area of around 0.7 km² (Fig. 4). For each of the patio groups identified, excavations of test pits (1x1m) were conducted. We used the same sampling method as the archaeologists working on the periphery of Tikal where the patio group constituted the main sampling unit. In Tikal test pits the size of 1 m² were localized off the backs and sides of structures, and thus they missed evidence of construction dating and reconstruction of individual structures, but had a greater probability of sampling stratified middens and dating the last major occupation (Fry 1969: 58). In case of the Nakum peripheries, the test pits were excavated in the area adjacent to one of the residential platforms, usually the largest one in the patio group. Additional archaeo-

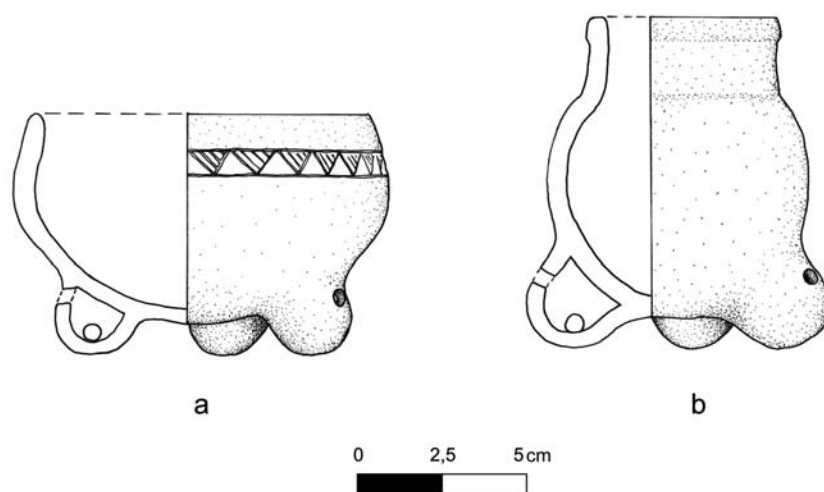
Table 7. Dating of patio groups on the periphery of Nakum

Chronological period	Number of patio groups in which material was recovered	Percentage content
Terminal Classic	28–31	77.8–86.1%
Late Classic	13–14	36.1–38.9%
Early Classic	6	16.7%
Late Preclassic	26	72.2%
Middle Preclassic	6	16.7%

logical material was recovered from looters' trenches which were documented in some structures at the Nakum peripheries.

The architectural remains in the periphery are mainly rectangular earthen and stone platforms grouped around courtyards, a typical Maya pattern. Patio groups identified during investigations at the peripheries are located at the highest parts of the terrain. Neighbouring zones with seasonal swamps or the lower-lying areas to the east and west of the Perigny Causeway are entirely free of settlement remains in spite of their proximity to the centre.

Archaeological test excavations have provided data for their dating (Table 7). However, the data presented below must be treated carefully because one test-pit cannot provide us enough information about the occupation history or construction activity of all the structures in the tested patio group. The earliest evidence of settlement can be dated to the Middle Preclassic period; material from this period was present in 6 patio groups. Late Preclassic sherds were found in 26 residential groups. Occupation vestiges at the periphery of Nakum from the Early Classic period are extremely meagre. Early Classic pottery was discovered only in 6 patio groups and it was usually mixed with later materials. Late Classic ceramics were discovered in 13 patio groups. Patio 52 yielded pottery which most probably can be also dated to the same period. Two groups (nos. 36, 40) yielded Late Classic pottery in every layer, indicating that they were constructed and used during that period. In 28 patio groups (nos. 15–19, 28–33, 35, 38, 42–44, 46, 47, 49–58), Terminal Classic material was identified. In three other groups (nos. 37, 39 and 41), pottery from the uppermost cultural level may also date to that very period. Of all the patio groups nine (16–18, 31, 35, 38, 43, 49, 53) might have been occupied exclu-



38. Two miniature vessels found in Burial 1, a) vessel NKMC 004; b) vessel NKMC 005 (redrawn by K. Radnicka after Hermes and Calderón 2000: fig. 136, Proyecto Triángulo, IDAEH)

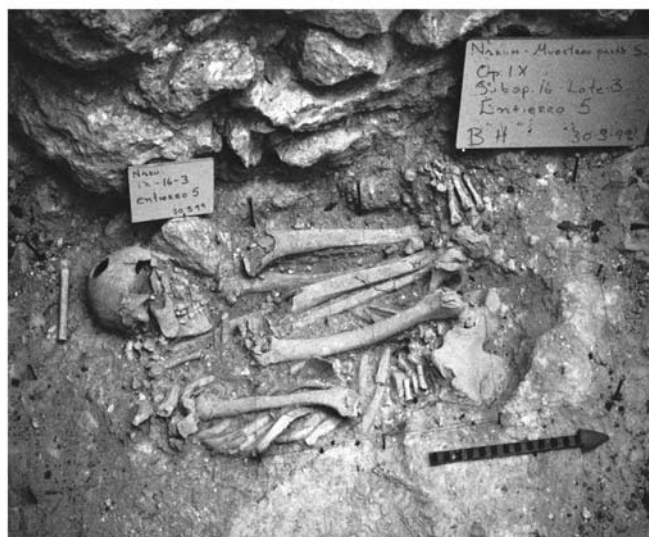
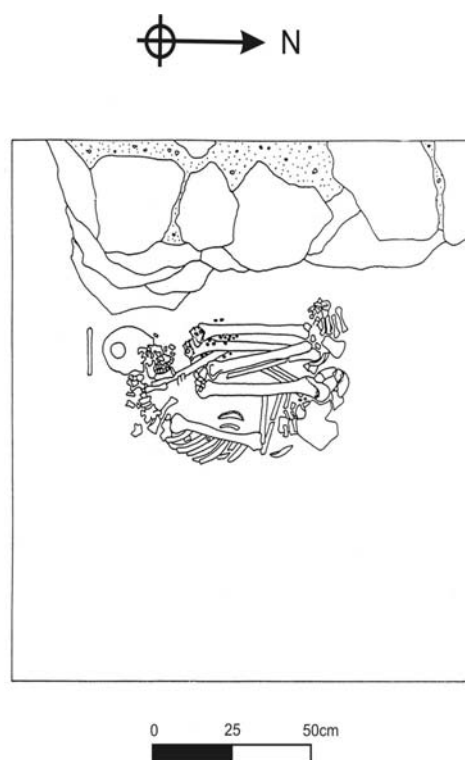
sively during the Terminal Classic since ceramic sherds from all the layers can be definitively associated only with this period.

If we assume that material from the cultural strata of all tested patio groups indicates their occupation to the time from which the sherds derive, it turns out that between 77.8 and 86.1% of all complexes investigated on the periphery might have been occupied during the Terminal Classic period. These data clearly suggest that the major expansion of settlement and demographic peak in the Nakum peripheries took place in the final part of the Classic period and is confirmed by the investigations carried out in the epicentre of Nakum.

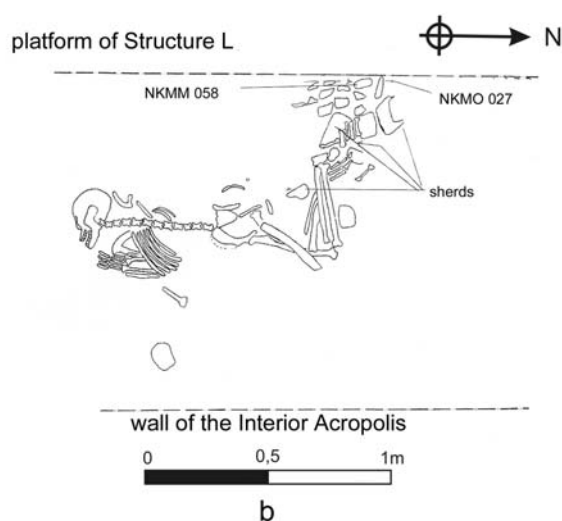
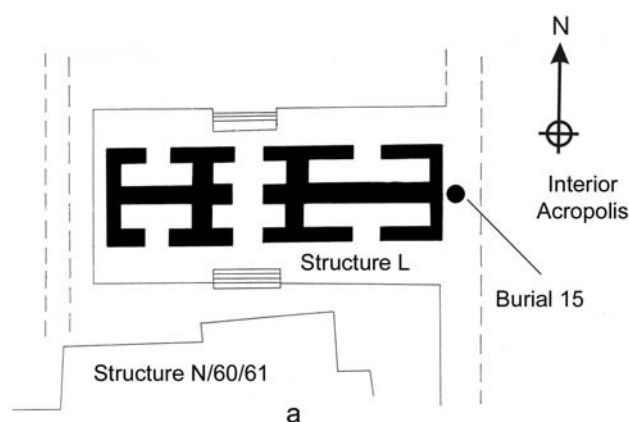
Patio groups which yielded Terminal Classic material differ in size, form and complexity. Large compounds are usually situated on elevated platforms with vestiges of relatively large palaces or temple-like structures, most of them with stone vaulted roofs (e.g., Patios 15, 32, 35, 38, 43 and 51/52) in contrast with small and modest compounds (e.g., Patios 16, 17, 31, 44, 49, 53, 55, 56). Among the largest compounds which brought Terminal Classic material, we have Patio 15 (Terminal Classic material in the two uppermost layers), Patios 35, 38 and 43 (Terminal Classic material in almost all layers [Figs. 43 and 44]) and Patios 51/52 (Terminal Classic material in the two uppermost layers). Among the modest compounds with Terminal Classic material we have Patios 16, 17, 31, 49, 53 (Terminal Classic material in all the layers), Patio 44 (Terminal Classic material in the uppermost layer), Patio 55 (Terminal Classic material probably in two uppermost layers), Patio 56 (Terminal Classic material in the uppermost layer).

Diversity among the above mentioned patio groups indicate that there were significant differences in social rank and probably also in access to the wealth among the people who lived in the periphery of Nakum during the Terminal Classic period.

A residential function for architectural remains is confirmed by the presence of chultuns, burials under the floors and quarries where stone was worked not far from the resi-



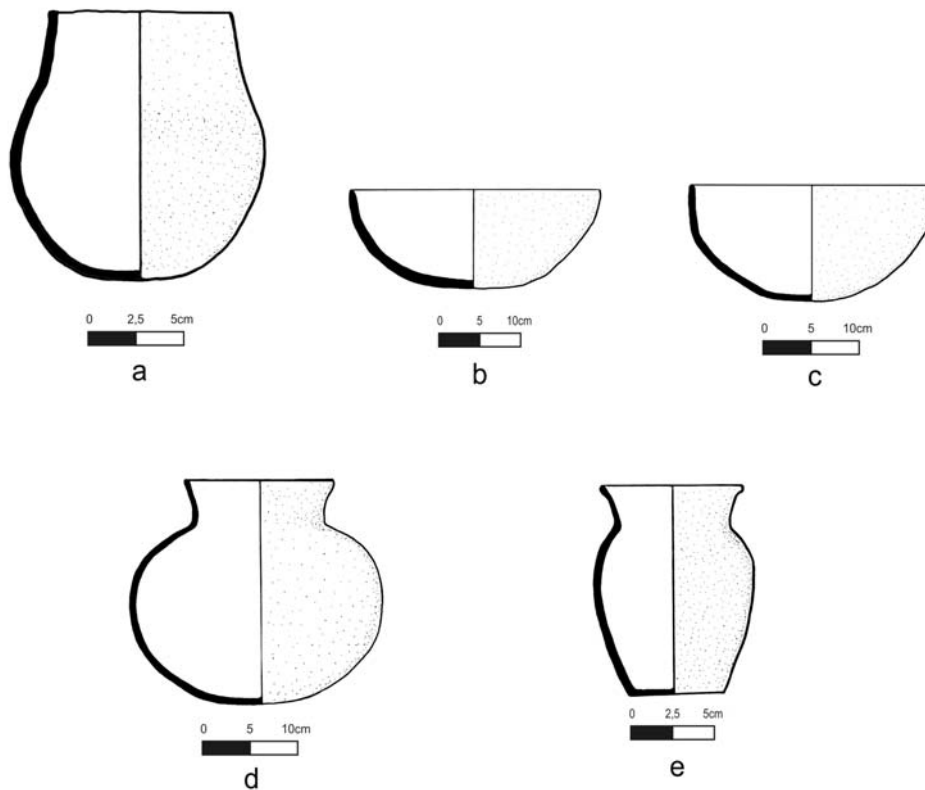
39. Nakum. Plan of Burial 5 (drawing by Justyna Olko, photograph by the author, Proyecto Triángulo, IDAEH)



40. Nakum. Location and plan of Burial 15 (redrawn by the author from Hermes et al. 2001: figs 116 and 121, Proyecto Triángulo, IDAEH)

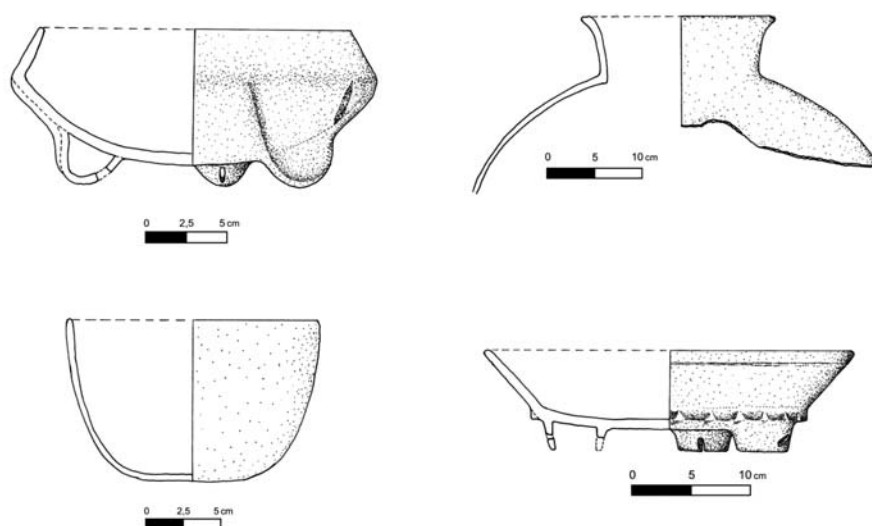
dential zones. The chultuns discovered in this area are located in the direct vicinity of residential groups, frequently within them. In total, 35 chultuns were discovered in Nakum, most of them outside the core area. In sum, 22 chultuns were excavated. Though in many cases chultuns housed material from different occupation phases, 13 of them (nos. 1?, 2, 4, 6, 9, 11, 16, 19, 22–25) had Terminal Classic sherds in nearly all layers.

A relationship between the chultuns which contained Terminal Classic material and their localization in the area or in the vicinity of the patio groups with prevailing or strong occupation from the same period was noticed. Chultun 1 is located close to Patio



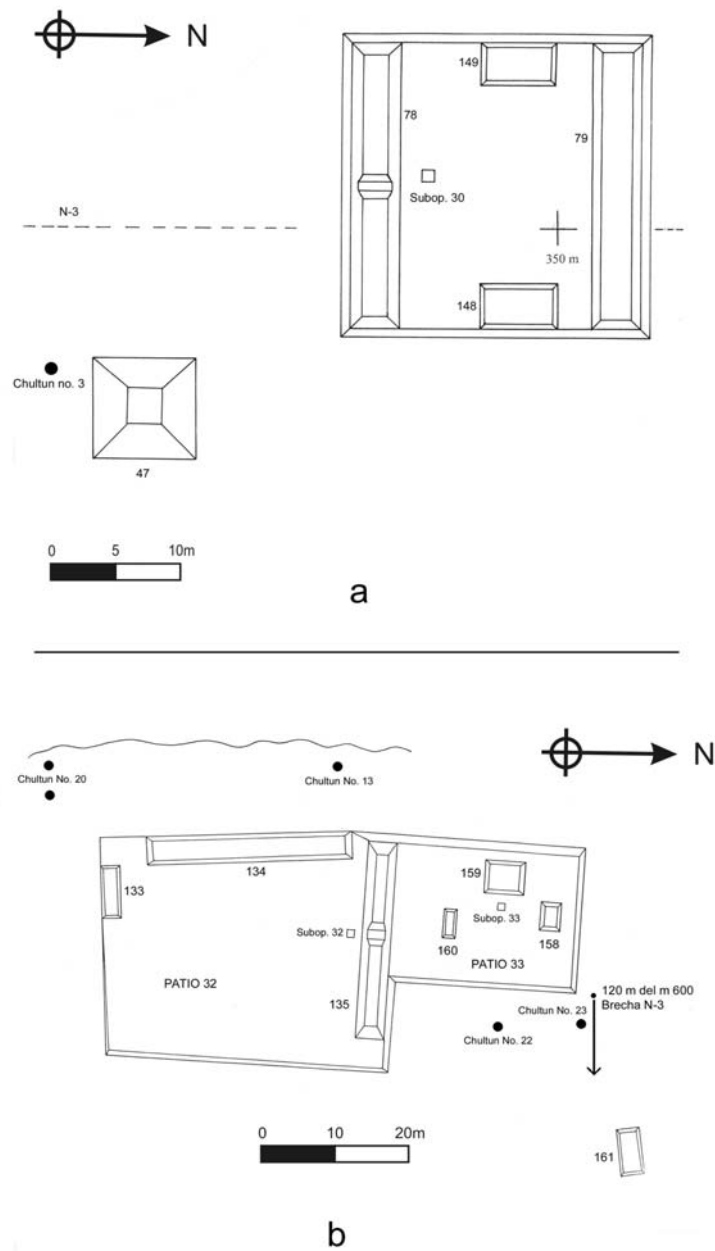
41. Nakum, a) vessel NKMC 057 from Burial 21, Cambio Unslipped, b) vessel NKMC 058 from Burial 21, Cambio Unslipped, c) vessel NKMC 023 from Offering 9, Cambio Unslipped, d) vessel NKMC 031 from Offering 14, Tinaja Red (?), e) vessel NKMC 063 from Offering 23, Tinaja Red (drawings by the author, Proyecto Triángulo, IDAEH)

18 in which two excavated test pits yielded exclusively Terminal Classic materials. Chultun no. 9 is located close to Patio 54 which showed very strong evidence of Terminal Classic occupation. The same situation can be observed in the case of Chultun 16 which adjoins Patio 35. Chultuns 22 and 23 with pure Terminal Classic material are located besides two patio groups (nos. 32 and 33) which, in the upper levels of the test pits had Terminal Classic sherds. Chultun 20 had Terminal Classic ceramics in its seven upper levels (0–6) and is located close to the south-western corner of Patio 32 where much Terminal Classic material has been recovered. Chultun 3 had Terminal Classic sherds in its two upper levels and it is located close to Patio 30 where test pit excavations also provided vestiges of occupation from the same period in the upper levels. Terminal Classic materials along with an offering (Offering 9 – Chultun 7) dated to either the Late or Terminal Classic were discovered in two chultuns (nos. 7 and 8) located in Patio 15 group, which has strong Terminal Classic occupation in its upper levels.

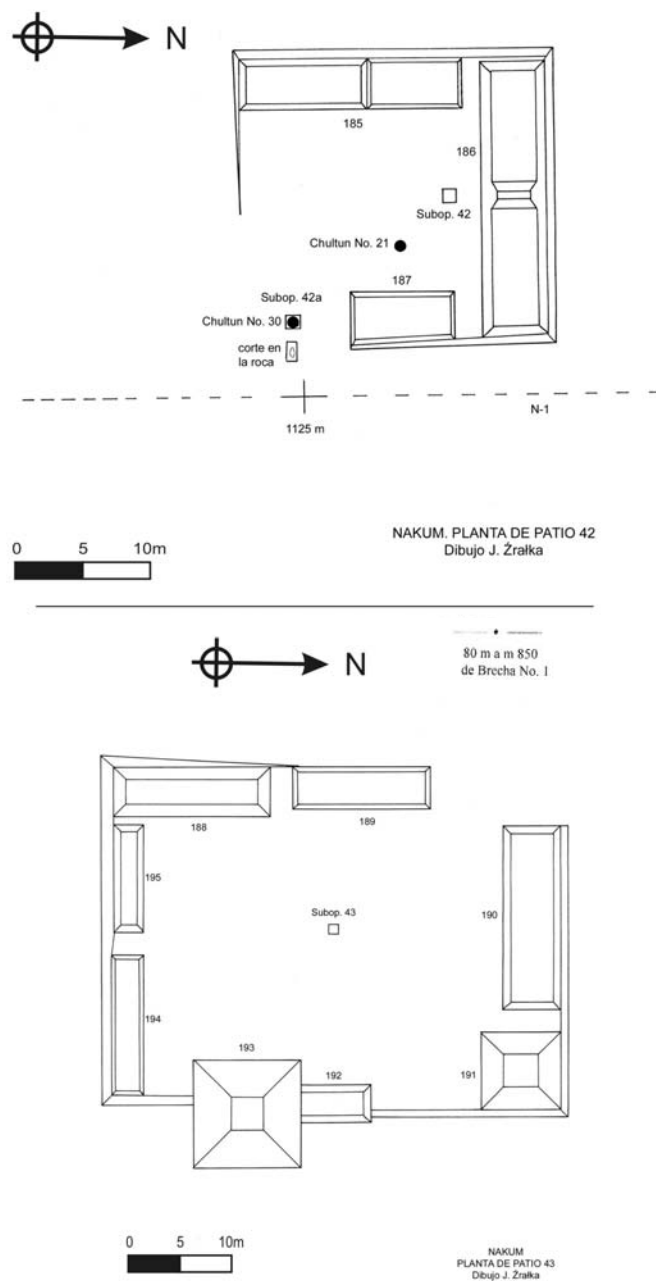


42. Nakum, a) vessel NKMC 016 from Offering 7, Tinaja Red, b) vessel 021 from Offering 9, Azote Orange, c) vessel NKMC 022 from Offering 9, Botifela Orange, d) vessel NKMC 024 from Offering 10, Camaron Incised (redrawn by K. Radnicka after Hermes and Calderón 2000: figs 144, 146, 147 and 148, Proyecto Triángulo, IDAEH)

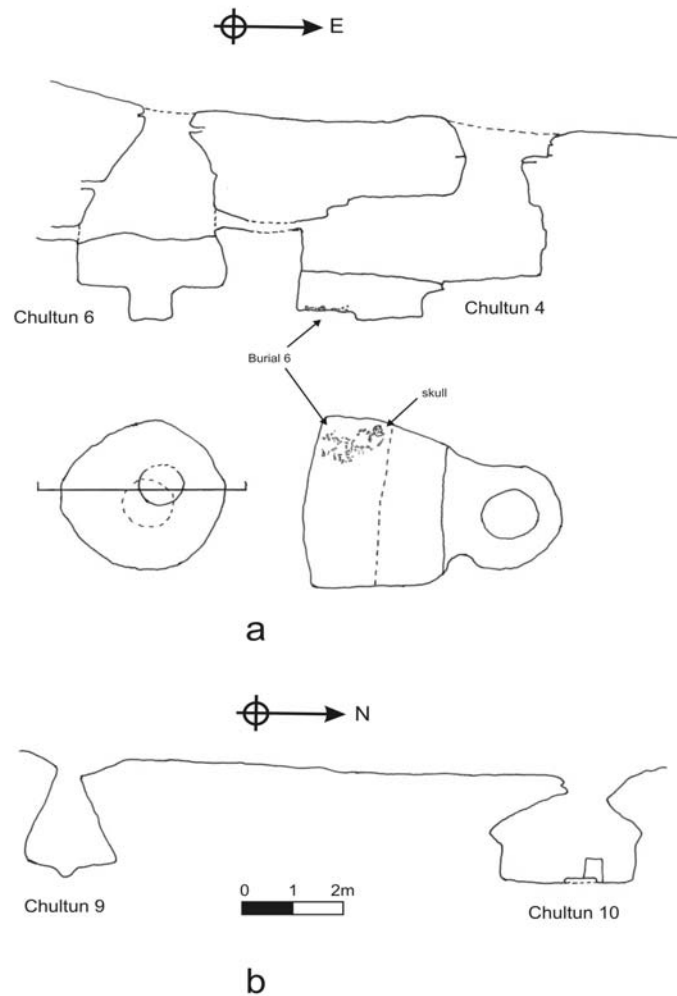
It is very interesting that many chultuns (nos. 4, 6, 11, 19, 24, 25) with pure Terminal Classic material were located close to the North Sector of Nakum. As it was previously mentioned, this part of the site was not extensively excavated. In my opinion, the location of Chultuns 11, 24 and 25 may be related either with some kind of activity in the area of the neighbouring Patio 55 which provided some Terminal Classic sherds in its two upper layers or with the occupation of the area of the North Acropolis. The same may be said in case of Chultun 19 located north of the North Acropolis. Data shown below indicate that these chultuns are probably related with architectural activity in this area. Three other chultuns: nos. 4-6 are located close to the Merwin Group and their existence here may be related with the architectural activity or occupation of that group or of the North Plaza. Most excavated chultuns that provided Terminal Classic materials have a bell-like section and a circular plan (Figs 45 and 46). It seems that this form was especially typical for Nakum during the Terminal Classic. We find this in the case of Chultuns 1, 2, 6, 9, 11, 23, 24 and 25. Chultun 5 has the same form but a few sherds discovered inside it were ascribed to the unknown phase of the Classic period. However, its form and localization close to Chultuns 4 and 6 indicates that it was also constructed during the Terminal Classic period. The forms of all the above mentioned chultuns indicate that they may have been used for the preparation of lime which was used during construction (probably as a final cover for the buildings) (Hermes and Calderón 2000: 79). Thus, the location of these chultuns mainly in the North Sector of the site may be related to the architectural



43. Nakum, a) plan of Patio 30, b) plans of Patio 32 and Patio 33 (fig. a: drawing by the author, fig. b: drawing by Justyna Olko, Proyecto Triángulo, IDAEH)

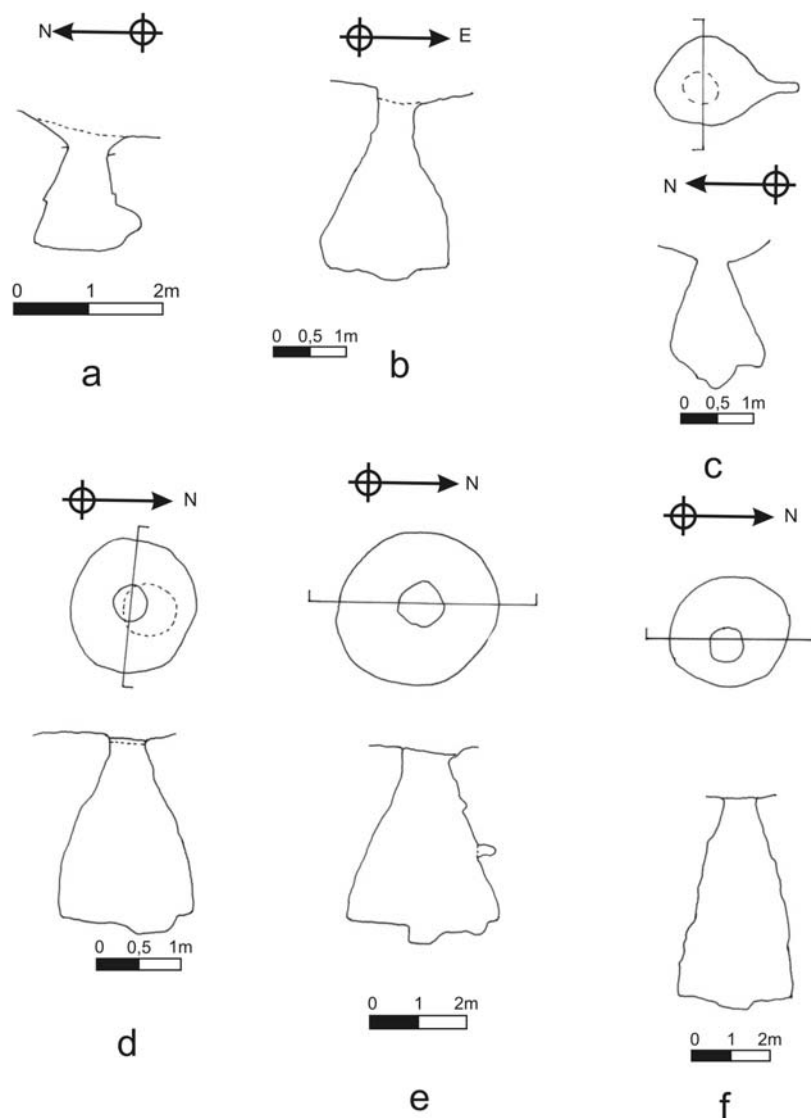


44. Nakum. Plans of Patio 42 and Patio 43 (drawings by the author, Proyecto Triángulo, IDAEH)



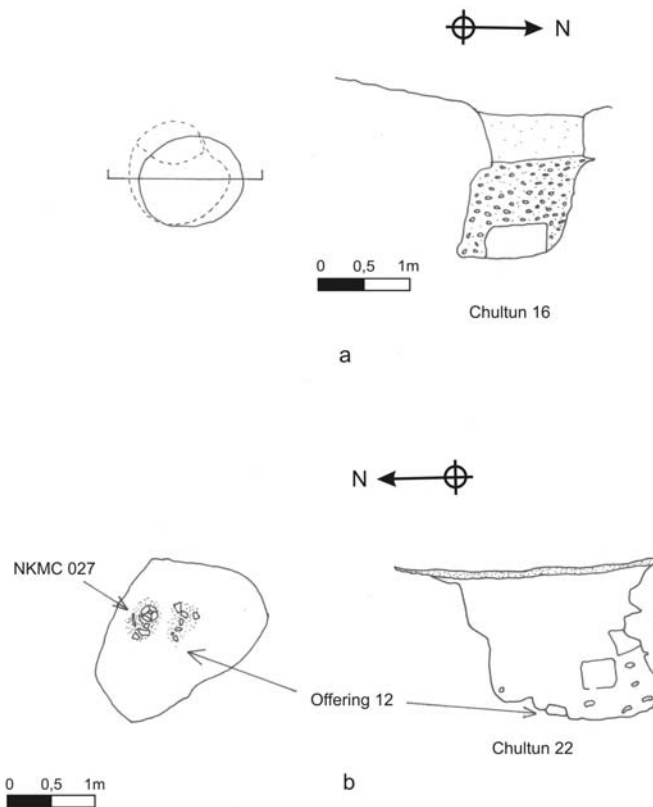
45. Nakum, a) plan and section of Chultuns 4 and 6 (redrawn by K. Radnicka from Hermes et al. 1999: figs. 91 and 94); b) section of Chultuns 9 and 10 (redrawn by K. Radnicka after Hermes and Calderón 2000: fig. 62, Proyecto Triángulo, IDAEH)

activity in that area. Other forms of chultuns which provided pure Terminal Classic materials and which are probably typical for that period are shallow chultuns with wide openings with a diameter identical to that of their bottoms. They may have had the same function as the bell-like shaped chultuns or they may have served as reservoirs to store water. These are Chultuns 16 (1.30 m deep, diameter: 1.10 m [N-S] x 1 m [E-W]) and 22 (1.50 m deep, diameter: 1.50 m [NW-SE] x 1.19 m [NE-SW]) (Fig. 47). It is very interesting that except Chultun 1, all other bell-shaped chultuns and shallow chultuns with wide openings contained only Terminal Classic ceramics. In case of the other chultuns



46. Nakum. Plans and sections of Chultuns 2 (a), 5 (b), 23 (c), 25 (d), 11 (e) and 24 (f) (redrawn by K. Radnicka after Hermes et al. 1999: figs 90, 93, 101, 105 and 106, and Hermes and Calderón 2000: fig. 68, Proyecto Triángulo, IDAEH)

that have different shapes and forms, layers with Terminal Classic sherds were always preceded by layers with sherds from the earlier epochs. Thus, while bell-shaped chultuns and chultuns with wide openings were constructed in the Terminal Classic, chultuns with other shapes seem to be created during earlier epochs and at least several of them continued to be used during the Terminal Classic.



47. Nakum, a) plan and section of Chultun 16 (redrawn by K. Radnicka after Hermes et al. 2001: figs 41 and 42); b) plan and section of Chultun 22 with location of Offering 12 (redrawn by K. Radnicka after Hermes and Calderón 2000: fig. 67, Proyecto Triángulo, IDAEH)

Some interesting Terminal Classic remains were identified in the area of Patio 42 (Fig. 44). Archaeological material from almost all layers of the test pit opened in Patio 42 is from the Terminal Classic. Two chultuns in the plaza of Patio 42 were discovered (Chultuns 21 and 30). One of them could be reached by means of a rectangular cut made in the rock. At first glance, though this cut seemed to serve as an access to the chultun, when cleared it appeared to be a cut made in the wall of one of the three chambers of the chultun. All of the material discovered in the chultun was from the Late Classic. It turned out that the actual access to the chultun was covered with a round stone slab which was visible from the interior of the chultun. Excavations undertaken in the plaza of Patio 42 showed that in the place where we expected to discover the mouth of Chultun 30 and the stone slab it covers, we found a small step or platform associated with Terminal Classic material. It is possible that during the Late Classic period some structures including at least one chultun (no. 30) existed here. The complex was probably abandoned and

later, during the Terminal Classic a new group of people occupied the place. They constructed a small platform of unknown function and probably some other structures in the area of Patio 42 as well. It is likely that while cutting stones from the bedrock for use in construction, they unwittingly came up against the chamber of the old chultun. This might explain the atypical cut in the wall of the chultun chamber.

Investigations on the periphery of Nakum brought the discovery of two Terminal Classic burials (no. 5 [Patio 16] and no. 24 [Patio 52]; see the section: Terminal Classic burials and offerings), as well as a few quarries. Quarries were identified close to Patios 54, 32, 33 and between Patios 40 and 44. All of these compounds (except of Patio 40) yielded strong Terminal Classic material in the test pits. Close to the quarries located in the vicinity of Patio 44, a few Terminal Classic sherds were also collected from the surface. This may indicate that most, if not all of these quarries were in use during the Terminal Classic period. It is also interesting that quarries located between Patios 40 and 44 still bore clear traces of cutting.

5.4. Terminal Classic ceramics

Over the course of a decade of investigations at Nakum, tens of thousands of ceramic sherds have been discovered. Though ceramics from the Terminal Classic period have not yet been thoroughly studied, some pertinent information is given below.

The majority of Terminal Classic slipped vessels from Nakum and other Triangulo Park sites belong to the Peten Gloss Ware Class. The most frequent ceramic type among this Class is Tinaja which is characterised by the use of red slip. This group is formed by 10 types, of which Tinaja Red and Camaron Incised are the most frequent during the Terminal Classic at Nakum. The most typical ceramic forms among the Tinaja Red type are deep bowls, jars and *ollas*. Dishes with notched basal flares dominate in the Camaron Incised type.

Other typical groups of the Peten Gloss Ware Class are: Máquina (brown slip), Azote (orange slip) and Achote (black slip). All these groups are represented during the Terminal Classic by similar ceramic forms (as in the case of Tinaja group). The most abundant were deep bowls with straight, out-flaring walls and curved, inclined inside rims. Other popular forms include *ollas* and jars with large diameter and curved out-flaring necks. The less common monochrome groups of the Peten Gloss Ware Class are Tialipa (brown slip) and Infierno (black slip).

The most popular ceramic group among polychrome ceramics is Zacatel. This group is characterised by the use of a cream slip. In Terminal Classic Nakum it is represented exclusively by the Cream-polychrome type. Typical vessel forms of this type are flat-bottomed tripod dishes with curved, out-flaring walls and bowls with straight and gently diverging walls. Another polychrome group present in the ceramic assemblage of Nakum, although to a lesser extent, is Botifela which is represented almost exclusively by the Palmar Orange-polychrome type.

Materials from the Vinaceous Tawny Class are present in lower frequency in the ceramic assemblage of Nakum. This class is represented only by vessels with polychrome decoration of the Chunhuitz Group.

Fine paste ceramics of the Fine Orange Class, represented by the Altar Group, were also found in Nakum. This group is mainly represented by the Pabellon Moulded-carved

type (Fig. 99), though the Trapiche Incised type is also present. The largest amount of Pabellon Moulded-carved ceramics was discovered in suboperations performed in the following structures: N/60/61, D, G and Z. Other Pabellon pieces were found in Structure 27, 62, I, in Patio 8 and in the area between Structures G, H, J and the Interior Acropolis. The whole vessels of the Altar Group were discovered in Structure D and in Burial 5, located in the peripheral patio group no. 16 (Fig. 95b). Trapiche Incised sherds were discovered in Structures N/60/61, F and in Patio 8. The main vessel form of Altar Group is a barrel with a tall ring base. Also, at Nakum a group of ceramics, classified by many archaeologists as “local imitations” of Pabellon Moulded-carved vessels were found (Fig. 98). In terms of ceramic paste and slip, these “imitations” belong to the Tinaja and Azote Groups (their shapes, forms and decorations are very similar to that from the Pabellon Moulded-carved type). However, Christophe Helmke who conducted preliminary examinations of some of these Moulded-carved ceramics from Yaxha and Nakum has suggested that what most archaeologists classify as “local imitations” of the Pabellon Moulded-carved type are in fact represented by two other types: Sahcaba and Ahk’utu’ Moulded-carved (Helmke 2006). Based on his extensive study of Moulded-carved ceramics from central Belize since 1996, Helmke identified the latter type and called it Ahk’utu’ (based on the glyphic referents to this type provided by the ancient Maya) (Helmke and Reents-Budet, *in press*). It differs from Pabellon and Sahcaba types in terms of paste, slip, form, decorative modes, and the presence of fully-viable hieroglyphic texts (Helmke and Reents-Budet *in press*). On the issue of the “imitations” of Pabellon, Helmke points out that these three Moulded-carved types (i.e. Pabellon, Sahcaba and Ahk’utu’) are contemporary, each with notably discrete spheres of distribution, though the eastern Peten is a zone of overlap for all three (Helmke and Reents-Budet, *in press*). The preferred attribution of Moulded-carved ceramics to Pabellon as the ideal Moulded-carved type further seems to stem from the fact that it was the first of these types to be designated, though it should be pointed out that Ahk’utu’ may in fact predate Pabellon Moulded-carved in the eastern Peten Lowlands, and therefore non-Fine Orange Moulded-carved ceramics cannot be properly referred to as “imitations” of Pabellon (Helmke and Reents-Budet, *in press*). Finally, based on the incidence of these types at Nakum it seems possible that Ahk’utu’ as well as Sahcaba might have been produced locally at the site itself or in its vicinity.

Another fine-paste type found in the ceramic assemblage of Nakum (although in a lesser amount) is the Fine Gray, represented by the Tres Naciones Group. So far one Fine Gray sherd has been discovered in the suboperation carried out in the area of Structure E. Of note, imported Plumbate vessels are also present in the ceramic assemblage of Nakum (nearly ten examples were found in the vicinity of Structures F and L).

All unslipped ceramics from Nakum belong to the Uaxactun Unslipped Class which is mainly represented by two groups: Cambio and Encanto. The most frequent is Cambio Group with Cambio Unslipped and Manteca Impressed types. The most common forms of these groups are *ollas* and jars of large and medium diameter, medium-curved out-flaring necks. Vessels of the Manteca Impressed type are decorated with “pie rims.”

Incense burners are among the ceremonial vessels from Nakum. These tend to be bowls with curved converging walls and hollow handles. Lastly, artifacts manufactured

from ceramic sherds (of various forms) were very popular in Terminal Classic Nakum as well as modeled figurines, which in many cases functioned as whistles.

5.5. Nakum graffiti

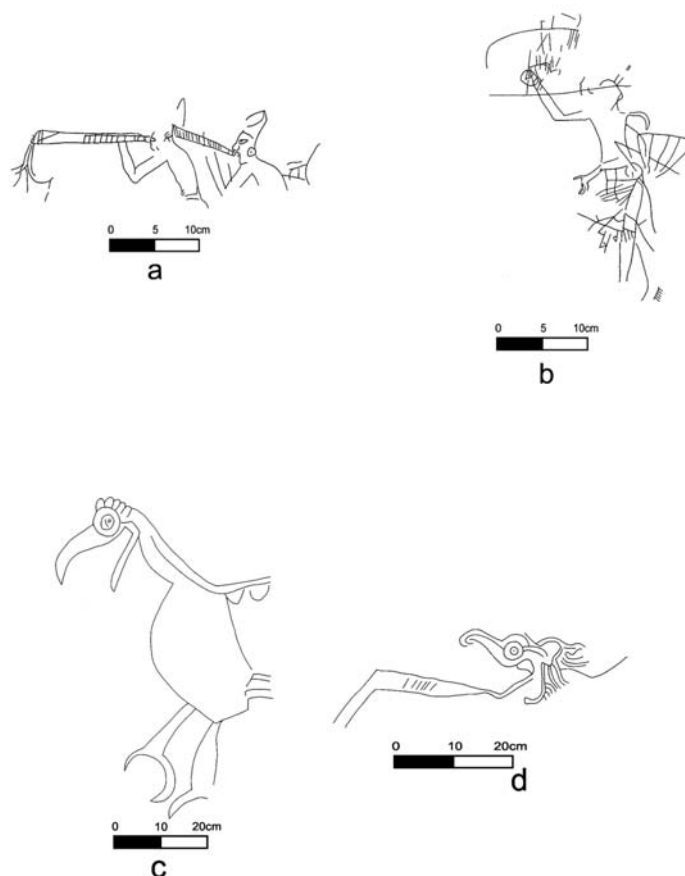
More than 150 figural graffiti were recorded between 1999 and 2004. They were incised, gouged or painted in the majority of the investigated structures located in the epicentre of Nakum. Graffiti documented by Bernard Hermes, Justyna Olko and the author between 1999 and 2001 were already published (see: Hermes, Olko and Żrałka 2001, 2002) but some of those which were recently discovered are still waiting to be published. Our studies indicate that the majority of graffiti were made during the Terminal Classic period by members of the elite class.

Graffiti were discovered in temple-type structures (A, U, V) and residential buildings (D, E, G, I, N/60/61, R and Y). Of these buildings, Structures Y, G and V were built during the Terminal Classic period. Graffiti registered in Structure D were made on the walls constructed during the Terminal Classic as well as during the Late Classic periods. In case of Structure E, graffiti were made in Chamber 1 which is of Late Classic date and in Chambers 2 and 3 which were constructed during the Terminal Classic period. Rooms of Structures N/60/61, R and I are of Late Classic date but it seems very probable that their walls (as well as walls of Chamber 1 of Structure E and walls of Late Classic chambers of Structure D) had been covered with stucco during the Terminal Classic period before the graffiti were made. Structure U is of Late Classic date (Tepeu 2) and graffiti made on the floor and walls of this temple most probably come from the same period. Thus, it seems that with the exception of Structure U, a Terminal Classic date for buildings or stucco coverings is a *terminus post quem* for the execution of graffiti.

As the architectural and iconographical context of graffiti from Nakum has been the subject of studies that have been published (Hermes, Olko and Żrałka 2001, 2002), I will focus here on providing some brief and concluding information concerning the graffiti. In terms of technique, the graffiti can be divided into drawings incised or gouged on the stucco-plastered walls (and in some cases floors) and images painted in black and red. Formal classifications of the graffiti can be developed on the basis of their iconography and stylistic differences perhaps as the result of their having been made at different times, or indicating social differences between their authors. In terms of the themes of graffiti from Nakum, we can distinguish antropomorphic scenes, zoomorphic scenes, representations of architecture, glyphic representations, symbolic or ceremonial motifs and scenes and representations of patolli boards. Stylistically, we were able to distinguish at least three groups of graffiti:

- 1) Graffiti of a fine style distinguished by soft, flexible and precise lines, bearing direct affinities with Late Classic formal art, especially calligraphic paintings on ceramic vessels. In this group we have representations of rulers or elites, animals, architecture, glyphs and motifs which are related to elite class interests (mat design, patolli boards etc) (Figs 48 and 49);

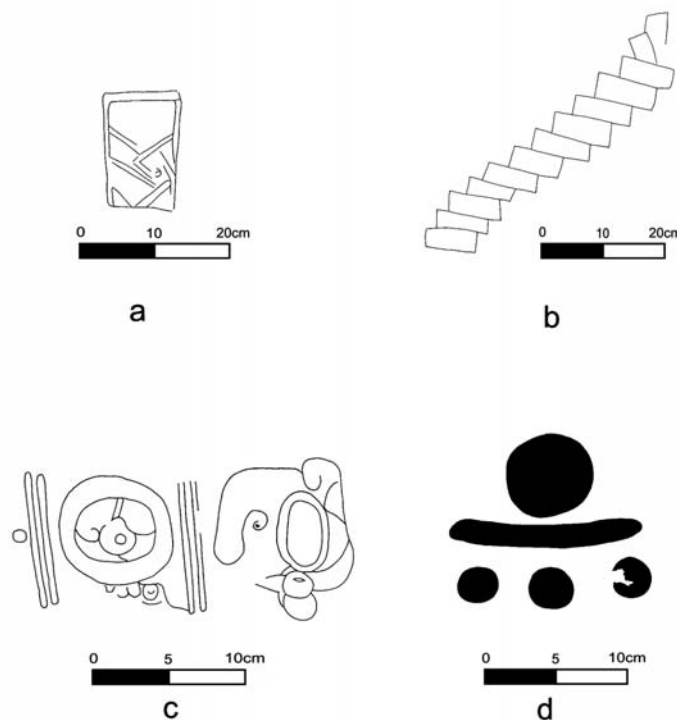
- 2) Graffiti of a style that stands apart from the Classic Maya tradition; these have formal traits frequently labelled as “foreign” or “Mexicanised”. Some of these graffiti show influence of the pan-Mesoamerican Mixteca-Puebla style typical of the Early Postclassic period. This group is represented by at least 3 or 4 graffiti (Figs 50 and 51);



48. Nakum. Graffiti of fine style: a) graffito A17, rear wall of the eastern chamber of Structure A; b) graffito A1, rear wall of the eastern chamber of Structure A; c) graffito D2, eastern wall of Chamber 24, Structure D; d) graffito D3, eastern wall of Chamber 24, Structure D (a–b: drawing by Justyna Olko, c–d: drawing by the author, Proyecto Triángulo, IDAEH)

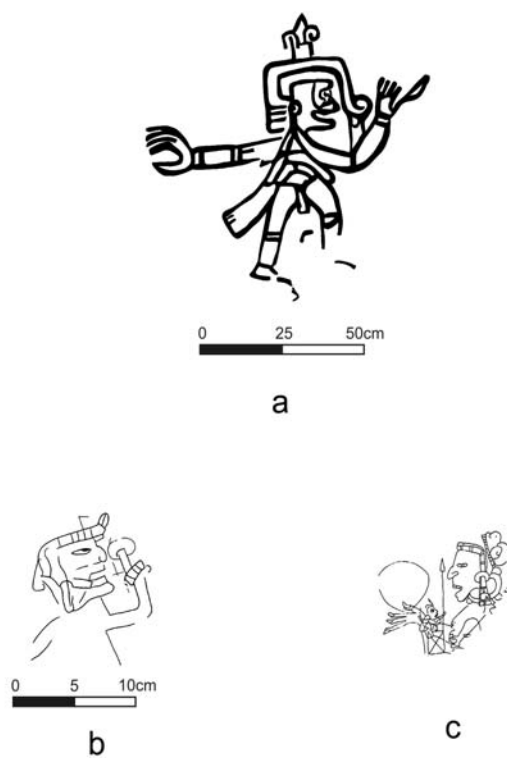
3) Crude images which sometimes are too rough or too simplified to permit the definite identification of motifs and objects represented. This group is the most frequent and is represented among others by graffiti shown in Figures 52 and 53.

The subject matter of the fine-line graffiti reveals close similarities to pieces of art functioning in more private contexts, such as painted ceramics and other portable objects or wall paintings. The most striking similarity is the frequent presence of themes associated with elite courtly life such as rulers or nobles, dancers or musicians, a surprisingly frequent theme in the Maya graffiti that is perhaps not coincidental. The elite nature and function of the graffiti is also confirmed by the interest in such motifs as the mat, a symbol of power, rulership and rank.



49. Graffiti from Nakum, a) graffiti E5, mat design, western wall of Chamber 1, Structure E; b) graffiti D8, mat design (?), eastern wall of Chamber 24, Structure D; c) graffiti E1, two glyphs (date?), western wall of Chamber 1, Structure E; d) graffiti 60/13, numerical record, Structure 60; a, c and d were drawn by Justyna Olko, b) drawing by the author, Proyecto Triángulo, IDAEH

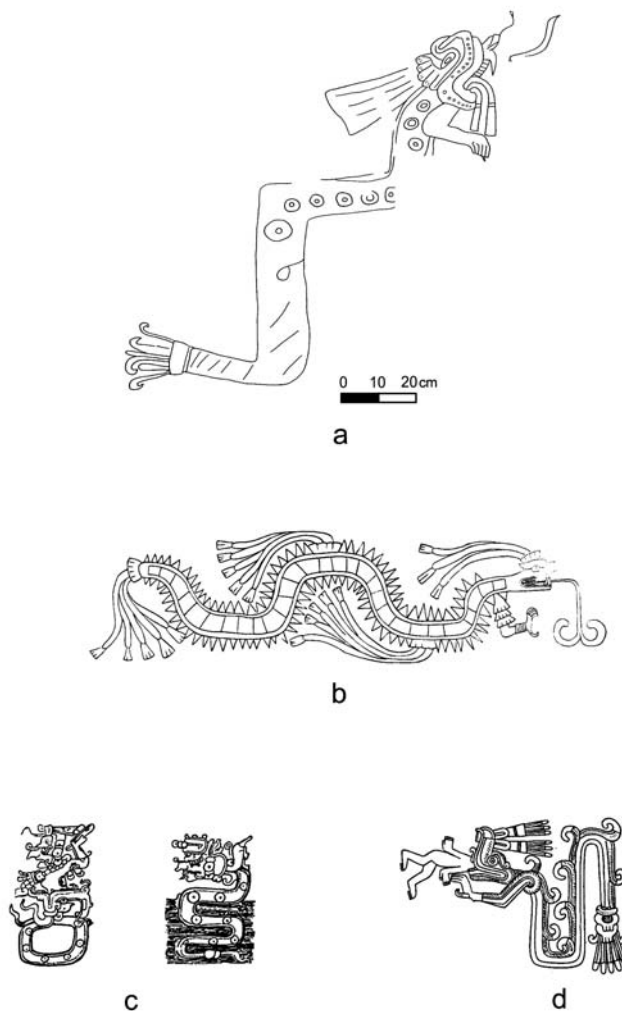
Of particular interest are graffiti which show foreign influences. One of them is a graffiti painted black on the posterior wall of the main chamber in Structure E (Graffiti E7 – Fig. 50a). The personage is shown *en face*, the head in profile and his hands stretch out to the sides. A line passing transversally through his face is a possible indication of a face painting. His attire includes a simple loincloth, a decorative element dangling from the back of his waist, bracelets on his legs and hands, round ear flares, and a headdress, apparently forming a kind of a mask, ending in the front with a volute. One detail of this head ornament that is especially striking is its crown in the form of a pointed end with two volutes or petals. An identical item is found in the Dresden Codex 50a where it forms a part of the headdress of the death god worn in this case by God S (Taube 1992: 116). Accordingly, it is possible to view this element as diagnostic (though quite rare) for Postclassic Maya iconography and to point out possible affiliations with northern Yucatan. The physical depiction and details of the attire are rather remote from the



50. Nakum, Graffiti of “Mexican” or “foreign” affinities: a) graffiti E7, Chamber 1 of Structure E; b) graffiti 61/18, Structure 61; c) graffiti from Tikal with “Mexican” influences, after Trik and Kampen 1983: fig. 16; a) drawing by Justyna Olko and Jarosław Żrałka, b) drawing by the author, Proyecto Triángulo, IDAEH

Classic Maya tradition, revealing strong similarities with Central Mexican iconography and especially with pre-Hispanic Mixtec codices (Hermes, Olko and Żrałka 2001: 49).

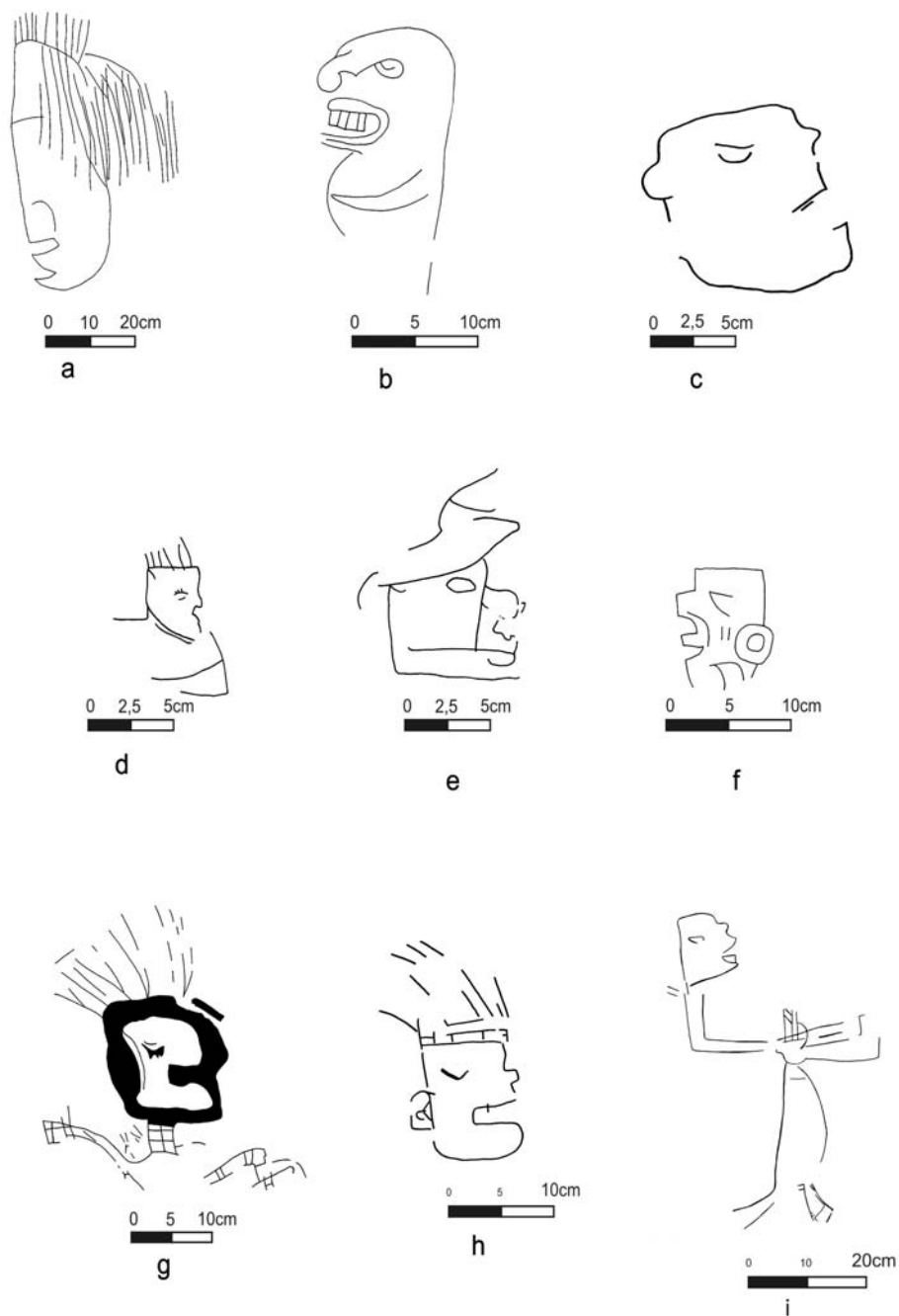
Yet another example of foreign features overtly depicted occurs in the graffiti from Structure 61 which is painted in black, precise, thin lines, delineating the contours of a man whose head and the superior part of the body only are preserved (graffiti 61/18 – Fig. 50b). His face, apparently bearing an indication of horizontal lines or a band, reveals features outside the Classic Maya canon, especially in the nose and the form of the jaw. Another diagnostic element supporting this identification is his headdress which has a narrow band (evoking associations with the *mecapal* cord that is very common in the Postclassic iconography) descending behind the ear and topped by a semi-oval element over the forehead. His hand grasps an object that may be a fan or, more likely, a spear-thrower. Thus, considering the facial traits and details of his attire, this image differs significantly from the typical Classic period representations and reveals affinities with “Mexicanised” Postclassic art, especially the Mixteca-Puebla style. Significantly, a graffiti showing



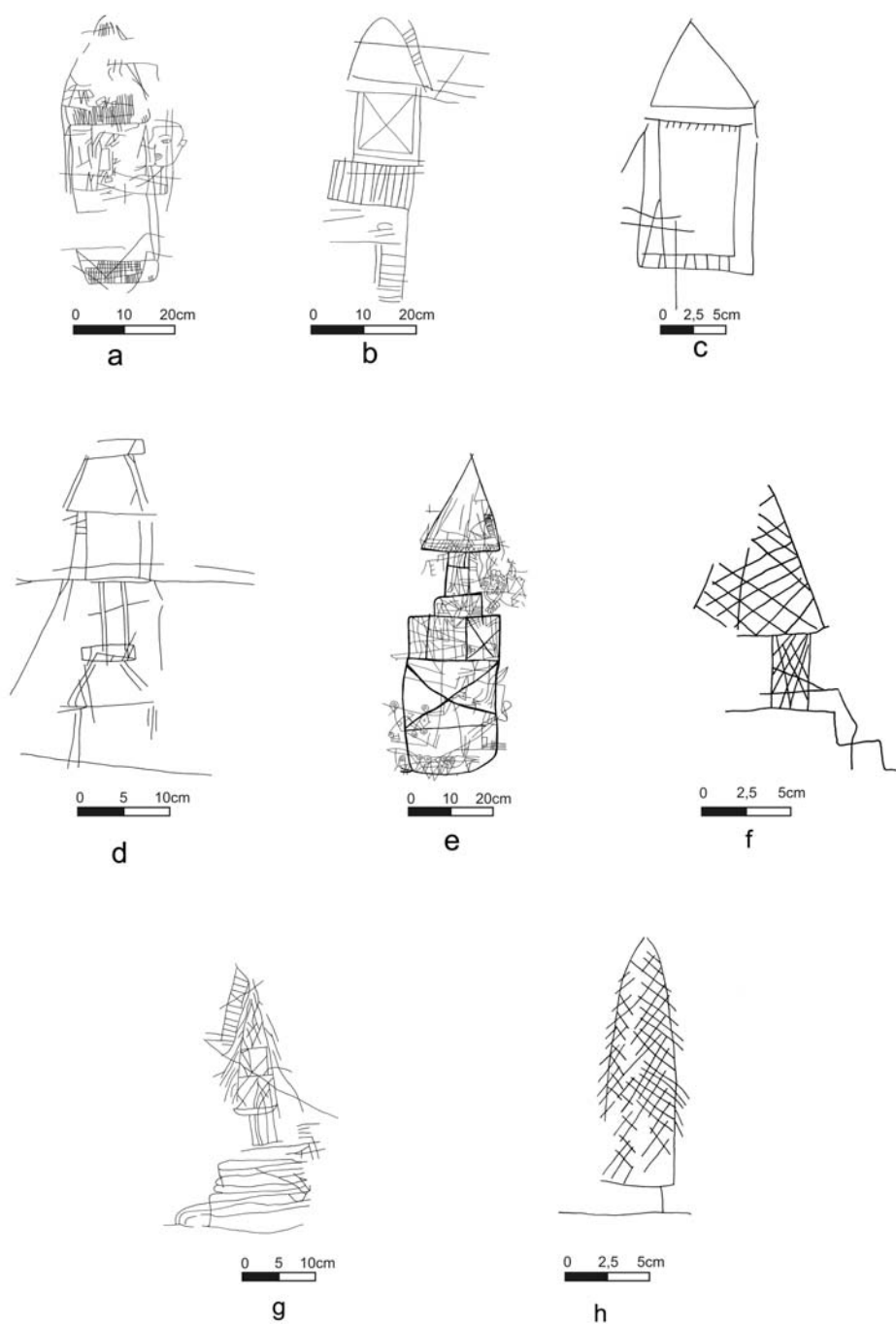
51. Nakum, a) graffito E12, Structure E (drawing by the author), various representations of legged serpents (b, d) and serpents with dots on their body (c) from Terminal Classic and Postclassic art; b) after Morris, Charlot and Morris 1931: fig. 259; c) Dresden Codex, after Spinden 1975: fig. 73; d) Borgia Codex, after Tozzer 1957: fig. 250

a similar face adorned with an almost identical headdress is known from Structure 5C-13 from Tikal (Fig. 50c) (Trik and Kampen 1983: fig. 16), which Kampen (1978: 168) identified as Postclassic “Mexican” in style (Hermes, Olko and Żrałka 2001: 50).

Another very interesting graffito occurs on the western wall of the Chamber 1 of Structure E, near the “Mexicanised” personage already discussed (graffito E7).



52. Nakum. Anthropomorphic graffiti of crude, simplified style (a, b, f and g drawings by the author, c, d, e, h and i drawings by Justyna Olko, Proyecto Triángulo, IDAEH)



53. Representations of architecture among the graffiti from Nakum (a-g drawings by Justyna Olko, h drawing by Jarosław Żrałka, Proyecto Triángulo, IDAEH)

It represents a reptile with an anthropomorphic foreleg, a feather crest on the head and a spotted body (graffito E12 – Fig. 51a). Again, its style and iconographic details differ significantly from the serpent iconography typical for the Classic period Southern Maya Lowlands but are very similar to representations of serpents known from Chichen Itza (Fig. 51b) and surprisingly, depictions of serpents and lizards in several Postclassic manuscripts (Dresden Codex, Borgia, and Laud – Fig. 51c-d).

Interestingly, some of the Nakum graffiti with late affiliations were painted in black and red (ex. graffito 61/18 from Structure 61 and graffito E7 from Structure E). This technical detail is an important argument in favour of their late execution because during their use in the Terminal Classic, the interior walls of both the chambers were painted black. Without doubt, at the time these paintings were being made in black, the paint on the walls must have already faded, which means that they can be dated quite differently from the known black graffiti from Tikal. There, only 4% of the graffiti were made in black paint and can be associated with all constructive phases from the Preclassic to the Late Classic (Kampen 1978: 159–161). Moreover, the archaeological evidence of post-constructive activities registered in Structures N and R as well as in Structure H directly adjacent to Structure E should be associated – in much the same way as the non-Classic graffiti – with the presence of the Postclassic group that arrived at Nakum (maintaining perhaps some links with northern Yucatan) or with the last residents of the site. Thus, although Andrews claims that there is no positive evidence from any site that favours a Postclassic dating for graffiti in the Late Classic buildings (Andrews 1999: 237), such evidence does exist in Nakum and is based not only on stylistic considerations (Hermes, Olko and Żrałka 2002: 130).

The group of painted Postclassic or generally later graffiti can be differentiated as far as their function is concerned. Clearly, the execution of the painted images in Structure E required much work, artistic preparation and iconographic knowledge. Accordingly, they could not have been made by simple squatters living around an abandoned city, but by the elite – which means that some type of elite group must have been present there at this late date. Moreover, the continuation of the graffiti on the wall where earlier Terminal Classic designs had been made implies that the importance of the building was preserved while the function of the graffiti was perhaps not much different from the earlier period. Judging from the subject matter, their function could have been ritual and commemorative. On the other hand, if we associate the crude graffiti from Structure R with the Postclassic people who left traces of their activities in the same room, it implies that these are rapidly made drawings with no obvious connections to the official art, either Classic or Postclassic.

As far as the graffiti of the third crude style is concerned, it should be stressed that this group is the most frequently encountered at Nakum. Among the representations that can be ascribed to this group, we have many rough and simplified representations which are sometimes hard to identify. On the other hand this group is also represented by images that are associated with courtly life (representations of palanquins, temples and pyramids; procession of warriors). Several ritual scenes which show the human sacrifice of a captive by an arrow or spear can be also ascribed to this group.

The analysis of the graffiti from Nakum and the associated architectural and archaeological data leads to several conclusions concerning their dating, iconographic content,

style and functions. The chronology of their execution encompasses both the Terminal Classic and the Postclassic period and can be correlated with the development of Nakum during the “epiclassic” period as well as traces of post-constructive activities dated to the Early Postclassic times. The data from Nakum clearly show that the creation of graffiti was not an uniform process. Despite the late provenience of Nakum graffiti, some of them reflect the best artistic traditions of the Late Classic period bearing similarity to pieces of official art (murals or ceramic painting), implying a high social rank for their authors; most probably the same residents of the buildings or persons who had access to them during their occupation or ritual use. Some of the graffiti reveal late, conspicuously Early Postclassic affiliations and thus postdate the constructive phases in the site. Still, at least some of them cannot be equated with the activities of simple peasants or non-elite squatters due to the level of their execution, style and iconographic detail – all of which indicate direct links between the art of this period and other Mesoamerican regions. Finally, some of the graffiti show a crude style and simple execution, and as such do not reveal any traits that would place them either within Classic or Postclassic art. As an apparently rapid and simplified record or merely a chaotic accumulation of lines, they should be perceived as the result of activities of persons with no artistic knowledge or training.

6. Postclassic occupation

Archaeological vestiges of the Postclassic period are very scarce at Nakum. Material from this period is limited to sherds found outside Structures D, L and O. Postclassic sherds were also found inside Chamber 4 of Structure E as well as in Structure M. Among the other Postclassic remains recovered were ceramic fragments and carbon from the southern part of Chamber 6 of Structure R (Hermes 2002: 284–285).

Important traces of Postclassic occupation were discovered in Building N. In Room 2 weights for a fishing net made from Postclassic ceramics with red slip were recovered. Moreover, in Room 3 residues of a hearth associated with Postclassic sherds were documented. The hearth was made of three stones and it is possible that it was related to a mythological hearth of creation (which the Maya associated with the Orion constellation). Finally, in Room 6 a concentration of charcoal and Postclassic ceramics were found. Most probably, the doorway between Chambers 2 and 3 of Structure N was sealed during the same period. Several graffiti documented in this construction were possibly also made by Postclassic inhabitants. Two samples from Building N that were subjected to C-14 analysis are associated with these Postclassic vestiges (samples Bln-5137 and Bln-5138). Both of them are from the 14-th century AD.

Significant Postclassic material comes from Structure H where one offering (no. 16) and one burial (no. 14) were discovered in Chamber 4 (see: Table 8). Yet another offering (no. 18) from this period was found in Chamber 29 of Structure D (Hermes and Calderón 2002: 217, 219; Żrałka 2002: 239). Postclassic vestiges were also discovered on top of the Interior Acropolis. In the north-western corner of Room 7 of Structure 65 which encloses Patio 6 from the east, a concentration of sherds which once formed a vessel of the Pozo Unslipped type (Offering 26) was found (Calderón et al. 2003: 122). Other

Table 8. A list of Postclassic offerings discovered in Nakum

No.	Location	Content
16	Chamber 4 of Structure H; the offering was laid on the floor in the southwestern corner of the chamber (Hermes and Calderón 2000: 155)	flat-based bowl (NKMC 032) of Pozo Unslipped type; fragments of skeletons of a turtle and few small birds
18	Structure D; the offering was discovered in the rubble derived from the fallen vault of Chamber no. 29	globular bowl (NKMC 046) of Pozo Unslipped type
24	Structure D; the offering was discovered in the rubble derived from the fallen northern facade of Structure D, 10.15 m west from the western doorjamb of the Chamber 11 (Calderón et al. 2003: 13)	ellipsoidal <i>olla</i> (NKMC 067) of Pozo Unslipped type (Hermes 2004: 16)
26	Structure 65, north-western corner of Room 7, between 0.30 and 0.40 m above the room floor. It was found broken into many pieces (Calderón et al. 2003: 122)	80% of a globular bowl of Pozo Unslipped type (NKMC 068) (Hermes 2004)
28	Found in an upside down position in a small space cut out in the southern wall of Structure G platform; 8.45 m east of the south-western corner of Structure G platform (Calderón et al. 2004: 33)	globular bowl 17 cm high of Pozo Unslipped type (Hermes 2004)

Postclassic materials were found close to the western part of the northern facade of Structure L. They included fragments of a plate with supports as well as a bowl and *olla* discovered between 0.20 m and 0.80 m below the surface (Calderón et al. 2004: 53). Postclassic sherds were also discovered in the humus layer (0–0.12 m below the surface) of one excavation unit opened on the summit of Platform 52 (Calderón et al. 2004: 88). Other materials from this period were recovered from one test pit excavated between Structures 14 and 15. Two probable Postclassic sherds were discovered in Chultun 7, located close to Patio 15 in the periphery of Nakum. However, they were mixed with earlier materials of Late Classic, Terminal Classic as well as Late Preclassic date (Hermes et al. 1999).

Significantly, except for Platform 52, Early Postclassic materials were found almost exclusively in the South Acropolis, the residential complex of Maya elites during the Classic period. The archaeological context of these finds indicates that the Postclassic population might have lived in palaces and participated in ceremonial activities. However, many of these buildings were beginning to fall into ruin at that time, if they had not already done so by the end of the Classic era. The best example of this is Structure D, where an offering was deposited by Postclassic inhabitants at the upper part of the soffit after it had collapsed.

The quantity of Postclassic remains in the South Acropolis clearly indicates that the Early Postclassic squatters living at the site were not very numerous. The population had probably decreased by more than 90% in comparison with that of the Terminal Classic. Significantly, the presence of materials such as ceramic sherds with Red-on-Cream decoration (Chompoxté Group [Fig. 100]) places this late occupation near the end of the Early Postclassic rather than at the beginning of this period. The ceramic material indicates a temporal gap between the end of the Terminal Classic and the beginning of the Early Postclassic. This archaeological discontinuity reveals that the Postclassic inhabit-

ants who left traces of occupation in the South Acropolis arrived at Nakum some time after the site had been abandoned by the Classic population.

Scarce and relatively late Early Postclassic materials also indicate that the abandonment of Nakum by its original inhabitants may have already begun in the Terminal Classic, probably in the latter part or at the end of that period. Thus the political-economic problems that probably led to the collapse of Nakum were already being manifested during the Terminal Classic period.

Of major importance is the discovery in Structure N of ceramics from Chompoxte group mixed with Tinaja Group fragments in an undisturbed archaeological context. This find indicates that: 1) either the Chompoxte Group ceramics appear earlier than previously thought or 2) that during a certain time after the collapse of the major sites of the central part of Peten some people continued to produce vessels of Terminal Classic Tinaja Group affiliation. I favour the second scenario and the existence of the occupational gap between the Classic and the Postclassic, since it is obvious that the Postclassic population of Nakum lived in structures which had not been maintained for a long time and were collapsing, as mentioned before.

7. Conclusions

Archaeological data indicates that the Terminal Classic was the period when Nakum flourished to its greatest extent, both demographically and culturally. The greatest architectural growth during this period has been recorded in the South and Central Sectors. The 2006 investigations by the Nakum Archaeological Project in the North Sector indicate that this area was still inhabited during the Terminal Classic period and it underwent important building programmes. The most frequent evidence of architectural activity of the Terminal Classic in Nakum has been found in the South Acropolis. All the structures that had been built in that complex in the earlier periods were successively rebuilt during the Terminal Classic. A large number of new buildings were also constructed during this period. As a result, 12 courtyards (also known as patio groups) located in the South Acropolis obtained their final shape and boundaries in the Terminal Classic. Structure S (separating Patios 9 and 10), Structures 26 and 27 (dividing off Patios 8 and 9) Structure 24 (separating Patios 7 and 8) and probably Structure P (separating Patios 5 and 7) and Structure 13 (separating Patio 9 and area in front of the Interior Acropolis) were constructed at that time. Furthermore, Structure O in the south-western part of the Acropolis and Structures Q and Z enclosing Patio 7 from the eastern and western side, respectively, were also built. Structure G and Structure H were constructed in the southern part of Patio 1 during the Terminal Classic. Yet another structure built at that time – Structure L encloses Patios 4 and 5. The Interior Acropolis was enlarged and five structures that form Patio 6 were erected on top of it (Structures Y, 63, 63 A, 64 and 65).

Among the newly-built constructions, Structures G and H are especially interesting, the facades of which were decorated with stucco representations. The walls flanking the stairs of Structure G were covered in representations of two lying prisoners, most probably rulers or high ranking officials who were defeated and captured by the ruler of Nakum. During the Terminal Classic, Structure G was one of the most important archi-

tectural constructions of the city. This is indicated not only by the discovery of the stucco sculptures mentioned above, but also by the fact that the false vault of the main chamber of the building has been decorated with paint and covered with various figural scenes, which unfortunately have been destroyed to a large degree. Moreover, the upper zone of all the exterior walls of this building was probably embellished with stone and stucco masks. The building most probably served as a residential and administrative seat of the Nakum ruler. The iconographic programme on its facade was an example of conscious political propaganda intended to emphasise the power and war deeds of the king. Structure G is located in a strategic position, it encloses (from the south) the largest courtyard of the South Acropolis – Patio 1 and it adjoins the Interior Acropolis from the north. The facade of the neighbouring Structure H was decorated in its upper part with a stucco frieze that is associated with the second construction stage (H-2). The frieze was decorated with glyphs which though not very well preserved, suggest that it was a record of a date in the Long Count. The preserved glyphs were made in a very late style, characteristic for the Terminal Classic (Simon Martin, personal communication, 2004). The finding of fragments of a wall-painting made with the use of red, black and green paint on the northern and western wall of Chamber 1 in Structure H was also an important discovery. Other examples of architectural sculpture decorated the cornice area of some structures dating to the Terminal Classic (ex. Structures L and S). A noteworthy fact is that the stucco and stone sculptures of Structures G, H, L and S were one of the most important and grandest examples of architectural sculpture that were made in Nakum during the entire Classic period. The appearance of those sculptures together with two stelae (Stelae C and D) dating to the 9-th century indicate that a highly qualified group of artists and craftsmen worked for the benefit of the king and his court at that time.

One of the grandest architectural enterprises carried out in Nakum during the Terminal Classic was the construction of a new version of the Interior Acropolis together with the two-story Palace Z which leaned against its platform. The Interior Acropolis was the highest point of the city in the Terminal Classic and Palace Y which dominated it was presumably a residence of the king and the royal family. Previously (in the Late Classic), this complex was lower and consisted of a platform that lacked buildings. During that period the seat of the ruler must have been located within the most impressive buildings that stood in the city at that time – Structure E or N/60/61, or in the area of the North Acropolis. During the Terminal Classic the Interior Acropolis was separated as a result of its highly restricted access. The entrance to the complex was through a stairway situated on the northern side. On that side, besides Structure G blocking access, a complex of masonry rooms resembling a labyrinth that was erected between Structures G, H, I and J also blocked access. Entrance to Patio 6 was most probably controlled at Structure 64 which was a double-exit chamber situated at the end of a stairway leading to the top of the Interior Acropolis. On the other hand, all archaeological material found inside Structure 64 indicates that domestic functions were also realized here. Structures 63 and 65, situated on the eastern and western side of the courtyard of the Interior Acropolis consisted of several rooms connected to one another, some of which were minute in size and vestibular in character. Some of these rooms may have functioned as storerooms and/or places where food was prepared and kept. Other larger rooms were probably living quarters. Within the boundaries of Structures 63, 64 and 65, fragments of storage and utilitar-

ian vessels were mainly found. Moreover, Room 5 of Structure 63 contained a large concentration of flint flakes that were created in the process of making stone tools. Archaeological research indicates that except Structure 63-A, all the other buildings situated next to Palace Y had roofs made of perishable materials (Calderón et al. 2003). It seems likely that Structures 63 and 65 functioned as living and working quarters for the people attending the ruler and his family residing at the adjoining Palace Y. Structure 63-A might have had a more public function (*oratorio?*) although we cannot rule out the possibility that it was also a place of residence. In the Terminal Classic period a two-story palace complex with 13 chambers (Structure Z) was also built adjoining the eastern wall of the Interior Acropolis.

During the Terminal Classic, a tendency to isolate the elite representatives of the South Acropolis is visible, especially the ruler and the royal family residing in the Interior Acropolis. This was achieved by confining the vast courtyards with newly constructed buildings. A similar tendency in architectural planning is visible in many Maya centres (among others Tikal, Uaxactun [Valdes and Fahsen 2004: 158–159] and Xunantunich) during the Late Classic. Not only did this lead to a separation of the elite representatives, but it also allowed control of access to the city centre proper.

Within the boundaries of the Central Sector buildings of a religious character are concentrated. Among these structures, those that were fully constructed during the Terminal Classic are: two pyramid-temples (Structures C and V), round construction (Structure 12), two low platforms (Structures 52 and 53) and three-chambered building (Structure 12A). Another temple (Structure A), was the subject of some slight architectural modifications. Though the neighbouring Temple B has not been excavated, it can be surmised that like Structure A, it dates to the Late Classic. Another pyramid (Structure U) was excavated in 2004 as part of the Triangulo Project by the author and Wiesław Koszkuł with substantive guidance from Zoila Calderón. Data from this research proved that the structure was constructed entirely in the Late Classic (Tepeu 2). A small amount of sherds from the Terminal Classic was found in the collapsed chamber located on the summit of the temple platform. The context in which the Terminal Classic materials appear may indicate that Structure U had been abandoned by the 9th century and had lost its function as a temple. The dating of Structure U to the Late Classic is also confirmed by the stela erected in front of it that was dedicated in the year 771 (Morley 1937–38).

Research conducted at Nakum points to the fact that during the Terminal Classic, the main focus of architectural activity was the construction or rebuilding of residential-palace structures. In the case of buildings constructed earlier, architectural activity is focused on the enlargement of living quarters by building new chambers and/or dividing existing chambers into smaller compartments to create rooms for the largest possible number of people. In case of Structure D, the number of chambers was increased from 19 in the Late Classic to 34 and later 38 in the Terminal Classic. Five new chambers were added to Structure R, three new chambers to both Structure E and I, one to Structure N and finally one room was added to Structure F. In the case of buildings erected during the Terminal Classic, such as Structures H and 24, the enlargement process may be observed that was based both on dividing existing chambers into smaller rooms as well as adding new rooms. In case of Structure H one chamber (H-1) was first divided into two parts (stage H-2) and later three new chambers were added (stage H-3). Structure 24 primarily

consisted of one rectangular chamber (stage 24-1), inside of which two transverse walls were constructed, creating three rooms (stage 24-2).

The construction of new residential and living structures, often tightly packed within the South Acropolis as well as the building of new chambers or dividing them with the purpose of creating a larger number of rooms indicates a considerable increase in the numbers of elite representatives during the Terminal Classic, on a scale not seen before. The enlargement of the city centre and demographic growth is accompanied by a demographic explosion and presumably, expansion of the periphery. Archaeological investigations indicate that 36.1 to 38.9% of all patio groups documented in the periphery of Nakum were inhabited during the Late Classic while in the Terminal Classic these numbers are increased to 77.8–86.1%. Consequently, we observe a 39 to 50% increase in the settlement process between the Late Classic and the Terminal Classic at the periphery.

Architecture and construction techniques did not change much from the Late Classic to the Terminal Classic. The walls of most of the Terminal Classic buildings were constructed with large, well hewn stone blocks that were covered with a stucco layer on the outside. Another popular technique involved the construction of inner and outer face walls from large well-worked stones; subsequently the space between them was filled with construction material which consisted of stones, soil, clay and mortar.

Another technique used at Nakum during the Terminal Classic period involved covering the facade of a building with tight-fitting, well cut and finished veneer stones. These stones were not used as a part of the foundation or for strengthening walls, but as decorative elements to provide the exterior finish. This technique was used to construct Structure G. It may also be found in other centres during the Terminal Classic, including the south-eastern Peten (Laporte and Mejía 2002: 67) or Seibal (Sabloff 1994). This technique is especially characteristic for structures built in the Puuc region where it was commonly employed.

Most of the buildings constructed in Nakum during the Terminal Classic have relatively thick walls that vary in width between approx. 1.30 and 2.50 m. However, there is a group of buildings with thinner walls (Structures 24, 62, H, the chamber that was built on the northern side of Structure F, the complex of rooms between Structures G, H and I as well as buildings 63, 63A, 64 and 65 constructed on the top of the Interior Acropolis). During the Terminal Classic, in many Maya centres, (including Tikal and Uaxactun) chambers with thinner walls were being constructed or thinner walls were being built within the boundaries of already existing chambers. In many cases, such walls were erected in a makeshift manner with carelessly prepared materials (Laporte and Fialko 1995: 88). This decrease in construction quality may be a reflection of a decreased cultural and economic viability of many Maya centres located in the Southern Maya Lowlands. In the case of Nakum, those buildings that have thinner walls that vary in width from approx. 0.70 to 1.30/1.50 m, were still constructed very precisely with carefully prepared materials. At Nakum, though thinner and thicker walls were constructed during the same period, thinner walls seem especially typical of the second half of the Terminal Classic, since it predominates in buildings that are stratigraphically later than other neighbouring structures; for example, Structures 63, 63A, 64 and 65 were constructed during the second construction stage of the Terminal Classic version of the Interior Acropolis and were built later than Palace Y; Structure 62 and possibly Structure 24 were constructed later than

Palace Z. Also, the complex of rooms situated between Structures G, H and I are later additions.

While discussing architecture, it must be emphasised that some constructional elements were especially characteristic for Terminal Classic structures at Nakum. A case in point is an element resembling a stone podium or stairway block constructed in the central part of the stairs of a building. This element occurs in Nakum on the stairway of Structure N, on the stairway leading to a platform which is surmounted by Chamber no. 6 of Structure E and on the stairway of Structure V. A stairway block can be found in the architecture of other Maya centres, among others on the Terminal Classic Structure A-II in Uaxactun and on the buildings in Altun Ha and Lamanai in Belize (Pendergast 1979, 1982, 1986). Another architectural element characteristic for the Terminal Classic Nakum is the appearance of masonry blocks or walls that were constructed on both sides of a stairway. Such elements can be found in Structures D, R, N and in Structure G. In case of Structure G, the walls were additionally decorated with depictions of prisoners. Similar examples can be found in the above-mentioned Structure A-II in Uaxactun. Yet another architectural element that became popular in Nakum during the Terminal Classic is the construction of balustrades along stairs. Such balustrades appear in Structures E, G and N.

Especially noteworthy are some elements in Nakum architecture that may indicate an influence from other places in the Maya area or in Mesoamerica. The northern walls of Rooms no. 1 and 5 erected between Structures G, H and I were decorated on the outer side with an interesting architectural motif; its cross-section consists of a low vertical wall topped by a moulding and reverse *talud*. The closest analogy with this kind of architectural motif is found in some centres of the Puuc style at the north of Yucatan. It occurs on the lower parts of the walls of the Governor's Palace in Uxmal (Kowalski 1987: figs, 58, 64) and at the base of Building A in Chacmultun (Marquina 1964: Table 225). Both centres flourished during the Terminal Classic. Another example of "foreign" trait represented in the architecture is a platform which supports Chamber 6 of Structure E and has a profile made up of a vertical wall surmounted by a *talud-tablero* which is crowned by an outward-sloping upper member or reverse *talud*. This architectural trait is very typical for Epiclassic El Tajín and Xochicalco and may reflect special relations with Central Mexico and the Gulf Coast (comp. Hellmuth 1993: 42; Laporte 1993: 307). The *talud-tablero*-reverse *talud* motif can also be found on a Late Classic platform on top of the pyramid base of Structure 1 in the Maler Group in Yaxha. Other examples occur in Tikal and date to the Ik or Imix phases (Laporte 1993; Jones 2003).

Stone pillars erected on the facade of Structures 63A, 64 and at the end of a T-shaped courtyard between Structures G, H and I are also worthy of attention. In each of those examples the pillars are square in cross-section. Stone pillars on the facades of buildings were a particularly characteristic element of the architecture of the Postclassic period, especially in the Northern Maya Lowlands. However, it is necessary to draw attention to the fact that such pillars occur in the Southern Maya Lowland architecture as early as the Terminal Classic. Stone pillars can be found in two buildings at Uaxactun: Structures A-II and A-IV, both constructed in the Tepeu 3 phase (Smith 1950). On the other hand, oval columns were discovered in Structure 1-3rd in Blue Creek, dating to the Early Classic (Driver 1996: 25-33) and in Aguateca (Str. M8-37), where they are dated to approx. AD 800 (Valdes and Fahsen 2004: 154). Yet another example comes from the

Terminal Classic Structure A-20 in Xunantunich (J. Braswell 1998: 722). In the Northern Maya Lowlands, pillars were employed as superstructural elements as early as the second half of the 6-th century in the Puuc region. Later, they became one of the most important architectural elements in Chichen Itza art, where grand galleries were supported by round columns as well as square pillars. Pillars and columns were also commonly used in Mayapan.

Although the problem mentioned above requires more studies, based on the early date of the Blue Creek columns, it seems likely that at least the practice of building round columns emerged in the Southern Maya Lowlands. Presumably, the construction of square pillars originated at a later date, although it is hard to determine precisely where or how it was propagated.

In my opinion the occurrence of square pillars in Nakum architecture during the Terminal Classic may be explained in two ways: 1) square pillars as a local architectonic innovation in the Southern Maya Lowlands became widespread during the Terminal Classic in many different centres, including Nakum and Uaxactun and reached as far as the Northern Maya Lowlands; 2) square pillars appeared in Nakum as a result of influences from the north, from the centres of the Puuc style and/or Chichen Itza which flourished, according to the latest research, during the period between approx. 750/800 and 1000/1050 (Cobos 1998, 2004). It is also interesting that one of the buildings in Nakum that has pillars in the facade – Structure 63A – appears to resemble, to a large degree, similar buildings from Chichen Itza (see: Cobos 2004: Fig. 22.5). The plan of Structure 63A is commonly known as the “tandem plan” (see: Freidel 1981).

Of particular importance is a round structure (Structure 12) constructed during the Terminal Classic period at Nakum. It should be stressed that Nakum is one of the few sites in the Southern Maya Lowlands where such structures were discovered in the Terminal Classic context. This architectural form was already present in Maya architecture in the Preclassic period but it became very popular and characteristic of the Terminal Classic and Postclassic periods in the Maya area. Round structures vary in size and form through time and they can be grouped into several different types based on such traits as height, the number of terraces their substructures contain, the presence or absence of stairways or superstructure, their location, orientation and function (for further details see: Morales 1993). In the case of Structure 12 from Nakum, only a circular substructure, approximately 16 m in diameter was unearthed; the shape and form of its superstructure remains unknown. Structure 12 is very similar to Structure 9 from Nohmul which consisted of a round substructure approximately 14.8 m in diameter topped by a circular superstructure over 9 m in diameter (Chase and Chase 1982). Structure 12 from Nakum is also similar to Structure 3C15 (Caracol) from Chichen Itza. Though the latter structure consists of a squarish platform and a Caracol superstructure from the last construction stage (3C15-1 A – which is now visible), it had a circular substructure in its earlier versions (3C15-1B and C). The Caracol substructure of stage 3C15-1C was approximately 18 m in diameter (Chase and Chase 1982: 605). Thus it was very similar to examples from Nohmul and Nakum. Nohmul structure is dated to the Terminal Classic/Early Postclassic Tecep phase (ca. AD 800–1100) (Hammond et al. 1988). Caracol from Chichen Itza most probably may be placed chronologically in the 9-th century or even earlier (Boot 2005). William Ringle and his colleagues (Ringle et al. 1998: 219, 221–

222; see also in Masson and Mock 2004: 391) argue that during the Terminal Classic/Epiclassic period, a pan-Mesoamerican sphere of political and religious interaction was established focusing on the cult of Quetzalcoatl. Thus, they associate the Terminal Classic round structures with feathered serpent symbolism. However, the round structures in Central Mexico are associated with Ehecatl-Quetzalcoatl, a duck-billed wind aspect of Quetzalcoatl. Iconography pertaining to Ehecatl shows up at Seibal (Stela 19), a site where a Terminal Classic round structure is also found (Str. C-79). Thus it is possible that Terminal Classic-Postclassic round structures in the Maya area may be more related with the wind god (*Ik'k'uh* in Classic Mayan) and not feathered serpent symbolism (Helmke, personal communication, 2007; see also Miller and Taube 1993: 84–85).

Though Nakum flourished during the Terminal Classic, the fall of the city must have taken place in the second half or by the end of that period, since later Postclassic materials are very scarce and can be linked to only a small group of inhabitants, who squatted in the palaces of the South Acropolis. The presence of Chompoxte type pottery in the ceramic material of the Postclassic period allows us to date that late settlement to the second half or to the end of the Early Postclassic. Consequently, this indicates a settlement gap between the abandonment of Nakum by the original inhabitants of the Classic period and the second occupation of the city by small groups of Postclassic settlers.

NARANJO

1. Location

Naranjo is located 18 km northwest of the city of Melchor de Mencos, close to the Belize border. Its geographical coordinates are: latitude 17° 08' 00" and longitude 89° 15' 27".

2. History of investigation

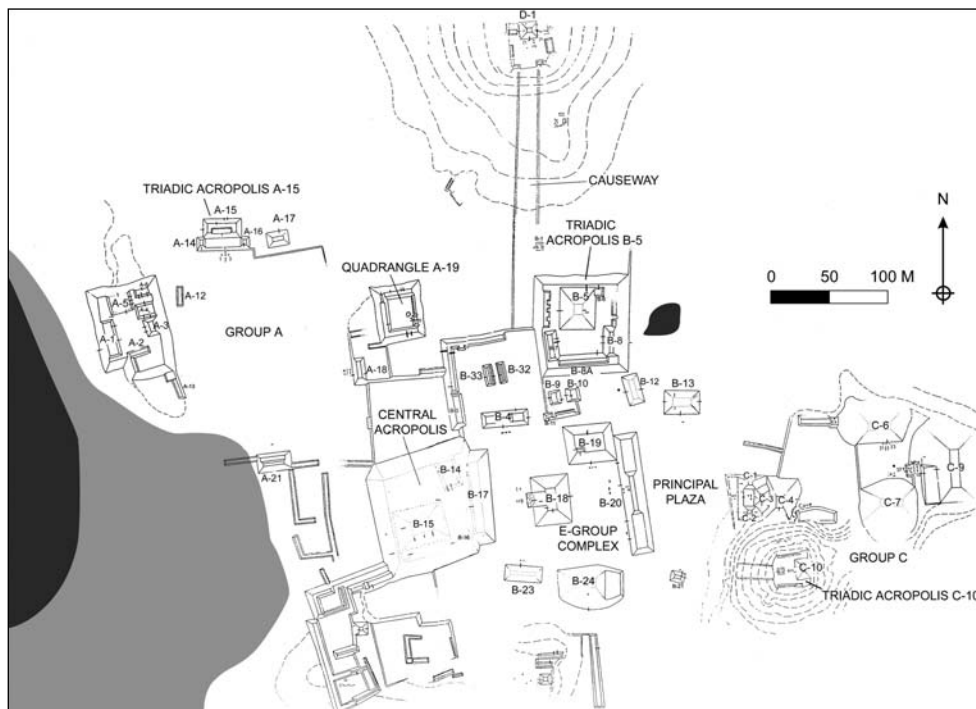
Naranjo was discovered in 1905 by Teobert Maler who prepared the first provisional plan of the site (Maler 1908). In the following decades, Naranjo was visited by different scholars; including Sylvanus Morley who introduced a nomenclature for the structures and monuments discovered at the site (he divided Naranjo into three groups denominated A, B and C, [Morley 1937–38]), as well as by Oliver Ricketson who mapped the site (his map was published in the Morley's book [1937–38: vol. 5, pl. 195]). In 1963, Richard Adams came to Naranjo and made latex moulds of some carved stelae. In 1969, 1970, 1973 and 1974 Ian Graham documented all the carved monuments (40 stelae, one altar, one lintel and hieroglyphic stairway) and prepared a precise map of the site which included the newly discovered Group D, located north of the Principal Plaza (Graham, Von Euw 1975, Graham 1978, 1980). Beginning in 1987, damage and looting activities were documented at the site under the aegis of the *Programa de Rescate* led by IDAEH

(Quintana and Wurster 2001: 89). In 1996, Naranjo was partly investigated by Vilma Fialko (1997a) under the aegis of the *Programa de Arqueología Regional* which covered the area of the transect connecting Yaxha with Naranjo. Fialko's investigations included excavation of a few test pits, documentation of several looters' trenches and tunnels as well as a correction of the existing map prepared by Ian Graham (1975). In 1996, several new monuments were also discovered (two plain stelae and one plain altar [Fialko 1997a]). Unfortunately in that year, the site fell under the control of looters and drug traffickers. Since 2000, Oscar Quintana and Raul Noriega started monthly visits documenting the scale of the plundering and looting. In 2001, operatives of the Triangulo Project made daily visits to the site, preparing the terrain for future excavations. The same year also saw the discovery of two new carved monuments at Naranjo (Stelae 42 and 43 [Mayer 2001, 2002]). Formal investigations started in 2002 under the direction of Vilma Fialko and are on-going at the present time. Fialko's investigations have focused mainly on the documentation of looters' trenches and on a vast test-pitting programme. Test pits were mainly excavated in the plazas and at the base of large structures, looters' trenches or tunnels. In sum, 253 looters' trenches were documented at the site (Fialko 2005a: 225). In 2004 a new and updated map of Naranjo was published by Oscar Quintana and Wolfgang Wurster (Quintana and Wurster 2004). The same year also saw the discovery of the next carved monuments, Stela 44 and Stela 45 (Fialko et al. 2004; Tokovinine and Fialko 2007).

3. Description of the site

The epicentre of the site occupies an area of approximately 1.5 km² and houses at least 112 structures which had ceremonial, administrative and residential function for the ruling family and elites of Naranjo. However, according to Fialko (2005a: 225), the site with its periphery occupied an area of approximately 8 km².

The central part of the site is made up of several complexes that stand out due to their great size and architectural complexity (Fig. 54). On the eastern side, there are several monumental complexes that form Group C. Among them we have a huge triadic complex made up of Structures C-6, C-7 and C-9. West of it there is another triadic acropolis (Structures C-1, C-2 and C-3), although smaller in size. Finally, the southern part of Group C occupies a complex consisting of 4 structures (C-10 – C-13) named the Triadic Acropolis C-10. To the west of that area, there is a vast plaza (Principal Plaza) with the E-Group complex (Structures B-18 and B-20). Further out, also to the west, there is a large platform topped by nine buildings (among them Structures B-14 – B-17) called the Central Acropolis. This is a large palace complex where, according to Fialko (2006), a royal family of Naranjo resided. To the southwest of the Central Acropolis, there is a complex consisting of a few courtyards surrounded by low and long structures. Most probably, this complex was inhabited by the local elites. North of the E-Group Complex, there are two ballcourts and the Triadic Acropolis B-5 which houses a large pyramid (Structure B-5) and a few smaller structures (B-6, B-7, B-8 and B-8A), two of them forming a triadic pattern with the pyramid. All the above mentioned structures form Group B. The area to the west of it is occupied by Group A which consists of an enor-



54. Plan of Naranjo (after Graham 1975 modified by A. Danecki)

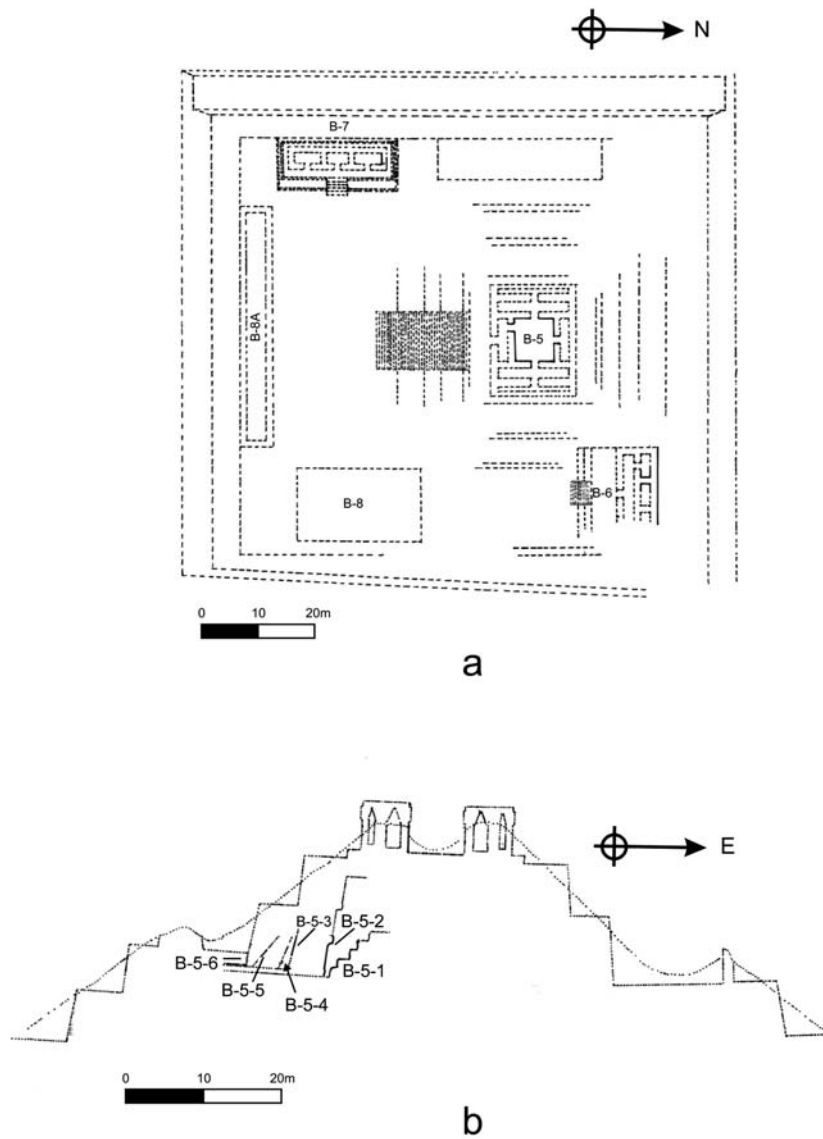
mous plaza surrounded from the north by Triadic Acropolis A-15, to the east by Quadrangle A-19, to the south by Structure A-21 and to the west by a large complex which is a platform surmounted by six structures (A-1 to A-6).

The central part of the site (Group B) is also connected by a causeway over 200 m long with a separated complex located on an elevated area with one dominant pyramid (Structure D-1) and a few adjoining structures. This complex is called Acropolis D-1.

4. An outline of the prehispanic occupation at the site

To date, the investigations carried out at Naranjo indicate that it was first settled in the Middle Preclassic. Material from this period was discovered on the hill where Acropolis D-1 was constructed, in the area of Acropolis B-5 and below one of the ballcourts. Below the platform of Acropolis B-5 vestiges of Middle Preclassic architecture in the form of a low platform were found (Fialko 2005a: 226). The first version of Structure B-19 is also dated to the same period (Gámez 2005: 236).

Naranjo developed to a great extent during the Late Preclassic. The first architectural versions of five Acropolises and the E-Group Complex were constructed at that time. It is very interesting that the E-Group Complex was constructed in the place where an *aguada* had existed. The local people gradually filled the *aguada* with construction



55. Naranjo. Plan and section of Complex B-5 (redrawn by K. Radnicka after Fialko et al. 2002: figs 42 and 43, Proyecto Triángulo, IDAEH)

material and covered it with several floors to create a flat level (Fialko 2005a: 227). Pyramid B-18, which is a part of this complex, had three Late Preclassic versions which were identified in the looters' trenches. Its first stage is not well known since it was found heavily destroyed. However, it was possible to ascertain that in the second stage, Structure B-18 consisted of a radial pyramid 40 m long on one side. East of it, a long platform (Structure B-20) approximately 60 m long and 2 m high was also constructed. These structures formed the E-Group complex. The whole complex was subsequently extended and rebuilt in the final part of the Late Preclassic period (Gámez 2004: 587–588, 592–593). Another construction (Structure B-19), which closes the E-Group complex from the north had two Late Preclassic versions. A small Late Preclassic residential platform was also detected below the eastern part of Structure B-24 which borders the same complex from the south (Gámez 2005: 236–237).

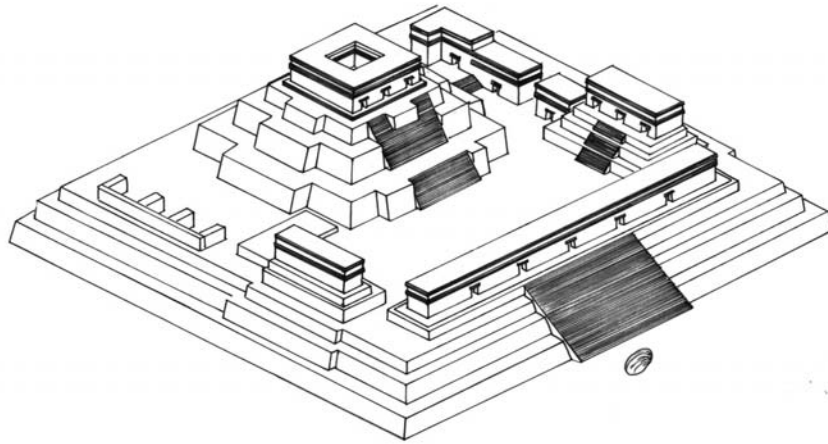
In the area of Acropolis B-5, a first version of Structure B-5 in a form of a five-teraced pyramid was constructed at the beginning of the Chicanel phase (Fig. 55). It was subsequently rebuilt in the course of this phase. The Pyramid B-5 was built on a hill. At the southern foot of the hill a cavity that yielded copious archaeological material was discovered. The artefacts indicate that it was used from the Preclassic to the end of the Classic period. Other triadic complexes of Naranjo (A-15, C-3 and C-10) are also associated with caves (Fialko 2004a: 596–597).

Late Preclassic architecture was also found below Temple B-4, as well as in the area of the Central Acropolis (East Patio) where a Chicanel stairway was discovered. This stairway may be part of a palace structure (Fialko 2005a: 227).

Material from the ensuing Early Classic is scarcer but all indications are that the site was still thriving and underwent several important building programmes. It seems that many Early Classic constructions at Naranjo were destroyed before a very intensive building programme was realised at the site during the Tepeu 1 phase. Early Classic materials were detected among others in Structures B-13 and B-5, B-18, B-19, B-20 and in the East Patio of the Central Acropolis. In the area of Acropolis B-5 the pyramid structure B-5 was rebuilt. Close to it the first versions of Structures B-7 and B-8 were erected. Due to their construction, a triadic pattern complex was formed here for the first time (Fialko 2004a: 597). Three tripod cylinders left by looters are also associated with the Early Classic version of Structure B-8 and they are probably part of a looted cache or burial from the Tzakol phase which was deposited within this construction (Fialko 2004a, 2005a: 228). Other significant vestiges of Early Classic architecture were discovered in Structure C-9, located in the eastern part of the epicentre.

During the Early Classic period the E-Group Complex was rebuilt (Gámez 2004: 588). In the Eastern Platform of this complex (Structure 20), a looted tomb-chamber, which was most probably from the Tzakol 3 phase was found (Fialko 2005a: 228). The Early Classic period also saw the construction of the fourth version of Structure B-19 which at that time consisted of a pyramid platform topped by 3 vaulted chambers. Structure B-19-4 was partly mutilated due to the construction of Burial 4. This burial is elitist in character and can be dated to the transition between Tzakol 3 and Tepeu 1 phases. Unfortunately the burial was heavily looted (Gámez 2005: 237).

It should be also mentioned that the Early Classic period yields the earliest information about the Naranjo rulers. The names of two of them are mentioned on a recently



56. Naranjo. Reconstruction of Complex B-5 during Tepeu 2 phase (redrawn by K. Radnicka after Fialko 2004a: fig. 8)

found Stela 45 (rulers Tzik' in Bahlam and Naatz Chan Ahk). The first very well known Naranjo king was Aj Wosal who commemorated several monuments at the site. His rule coincided with the end of the Early and the beginning of the Late Classic period (546–615>) (Martin and Grube 2000: 70–72; Grube 2004: 196–197; Tokovinine and Fialko 2007).

Fialko's investigations as well as numerous inscribed monuments found in Naranjo indicate that the Late Classic saw the greatest development of the site and most of the architectural complexes visible now in Naranjo were built or rebuilt at that time (for further details concerning Late Classic history of Naranjo see: Martin and Grube 2000: 70–83 and Grube 2004). In the Tepeu 1 phase, we observe the construction of many palaces of the Central Acropolis. This period also saw the building of the new version of the Palace B-19, which most probably had two floors as well as the new version of the radial pyramid B-18. Moreover, the first version of Structure B-24 was constructed at that time (apart from the small platform of Late Preclassic date that was found below this structure) (Gómez 2005: 238). The great complex of Acropolis B-5 was also developed in the Tepeu 1 as well as in the subsequent Tepeu 2 phase (Fig. 56). The latter phase saw the construction of a quadrangular palace complex at the summit of Structure B-5 (Fialko 2004a: 597–598; 2005a: 228–229).

During the Tepeu 2 phase, we observe a great increase in architectural activity in the epicentre as well as in the periphery of the site. This period is characterised by the construction of many new structures including large pyramids in the epicentre (Fialko 2005a: 229).

Tepeu 3 material so far excavated at Naranjo indicates that although the site was in large part depopulated, a significant number of people survived into the Terminal Classic. This period also saw small scale remodelling and construction activity in the various complexes of the site (Aquino 2007, Fialko et al. 2002, 2003, 2004).

5. Terminal Classic occupation at the site

The majority of the Terminal Classic material was recovered in Groups B and A, mainly at the humus level, in the fill of looters' trenches and in the rubble of fallen chambers. There are also traces of architectural activity dating to this period in Naranjo.

Evidence of Terminal Classic activity was discovered in Structure B-18, a huge pyramid of the E-Group Complex. This structure consists of a pyramid substructure topped by a temple which had a rectangular plan and measured 20 x 11.50 m. The temple had accesses from all four sides and consisted of over a dozen vaulted chambers. During investigations, some Tepeu 2-3 sherds were found in the humus layer in front of the western stairway of Structure B-18 (Op. 3, Subop. 8), in a layer of ash over the floor of the north-western chamber (northeastern corner of the chamber) and in the rubble of the central chamber located in the southern wing of the temple building (Fialko et al. 2002). Gámez (2004: 590) notes that at the end of the Late Classic or at the beginning of the Terminal Classic, the central chamber of the southern wing of the temple was sealed. This move resulted in closing the principal access to the temple from the south as well as in sealing doorways that led from the central chamber to the neighbouring, lateral rooms.

Material from this period was also documented in Structure B-4 which consists of a large pyramidal platform supporting a temple with one long chamber. Two looters' trenches located on the northwestern and western sides of Structure B-4 (Op. 6, Subops 1 and 7) contained Terminal Classic sherds (Fialko et al. 2002: 38, Annex 2). The looters left a large amount of Terminal Classic ceramics while digging and it is assumed that the superstructure located at the top of the pyramid platform of Structure B-4 was used by Terminal Classic occupants (Fialko et al. 2003: 35).

A significant number of Terminal Classic materials were also found in the so called Triadic Acropolis B-5 that is formed by Structures B-5, B-6, B-7, B-8 and B-8A (Fig. 55). The largest building of Triadic Acropolis B-5 is Structure B-5 which consists of a pyramidal platform supporting a complex of 4 palace structures (B-5A, B-5B, B-5C and B-5D) arranged around a small courtyard. Investigations carried out in 2003 in the central sector of the southern facade of Structure B-5C (which is located at the entrance to this complex) revealed that its room was sealed during the Terminal Classic period. Close to the doorjamb on the southern facade of Structure B-5C, many fragments of a small bowl of Tinaja Red type dating to the Terminal Classic were also discovered (Fialko et al. 2003: 46). During the Terminal Classic, rooms of the eastern wing (B-5B) of Structure B-5 palace were also sealed (Fialko 2004a). Additionally, Structure B-5 contained Terminal Classic material in a looters' trench dug on its western facade (Fialko et al. 2002). Copious evidence of Terminal Classic occupation was discovered inside or outside several palace structures, such as B-6, B-7, B-8 and B-8A. Moreover, Terminal Classic middens were detected in the East and South Patios of the Acropolis B-5 (Fialko

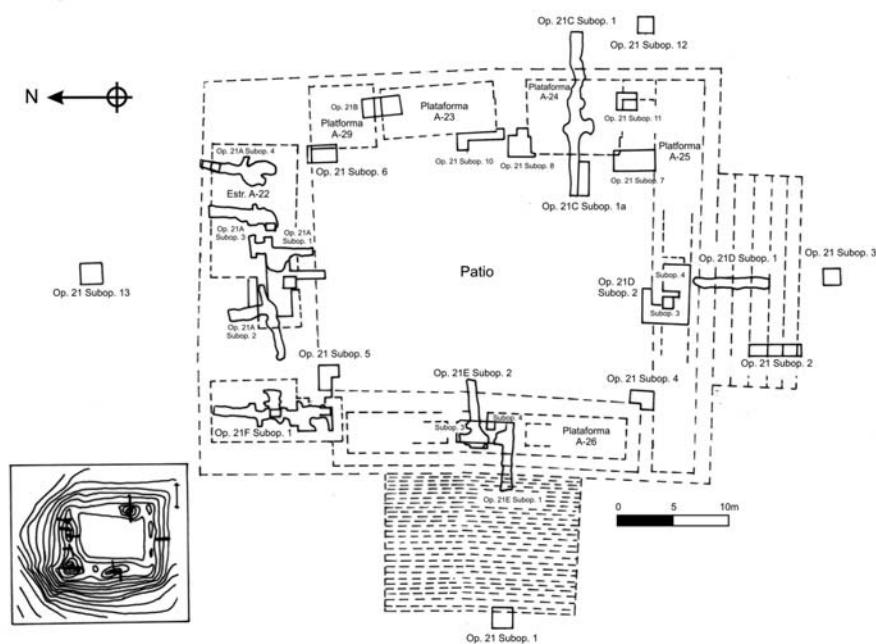
2004a: 599). Three registers made inside looters' trenches dug in Structure B-8 (Op. 8, Subops. 1B, 4B, 5A) contained Terminal Classic sherds. The same material was discovered in the rubble of Structure B-8A (Subop. 5B). Another building – Structure B-6 yielded Terminal Classic sherds in the debris inside a looters' trench made at its northern facade (Op. 8, Subop. 8). Material from the same period was also discovered in two upper layers of the test pit excavated at the base of the stairway on the eastern facade of Structure B-7. A looters' trench dug in the northeastern room of the same structure contained Terminal Classic sherds. Another test pit excavated at the eastern side of the central plaza in front of Structure B-5 yielded in its uppermost layer a fragment of a plate dated to the Tepeu 2-3 period (Op. 14, Subop. 15) (Fialko et al. 2002). In sum, a large amount of Terminal Classic materials found in Triadic Acropolis B-5 indicates that this complex was densely occupied at the end of the Classic period. Terminal Classic materials were also found in the cave located at the foot of the Triadic Acropolis B-5 complex. Their discovery indicates that the cave was continuously used from the Preclassic until the Terminal Classic (Fialko 2004a: 597), most probably for ceremonial purposes. Moreover, one looters' trench documented at the western facade of Structure B-1 located north of the Triadic Acropolis B-5 contained several sherds dated to the Tepeu 3 period.

Fialko et al. (2003: 32) documented evidence of Terminal Classic architectural activity in Structure B-19, located at the northern end of the E-Group Complex. Structure B-19 consists of a pyramidal platform which once supported a superstructure. During investigations, 5 architectural stages of that building, dating between the Late Preclassic and Late Classic periods were documented. Fialko et al. (2003: 32) mentions that this structure underwent remodelling during the initial part of the Terminal Classic period. This remodelling included the enlargement of the Structure B-19 platform by the sealing of rooms from the previous architectural stage (Aquino 2007).

Terminal Classic materials were also recovered from Structure B-23 which is located southwest of the E-Group complex. One test pit excavated in front of the northern facade of Structure B-23 (Op. 19, Subop. 2) contained Terminal Classic sherds in its first layer (humus) (Fialko et al. 2002).

It should be also mentioned that archaeological excavations carried out in Structure B-24 (which consists of a pyramid platform topped by a single chamber) revealed that it had never been finished. The uppermost terrace of the pyramid platform lacked masonry on its northern and especially, eastern facades (Gámez 2005). According to Fialko et al. (2004) and Gámez (2005), ceramics recovered during excavations and related with the last and main architectural stage of that structure were of Tepeu 2 and Tepeu 3 date. These materials may indicate that the construction of Structure B-24 stopped between the Late and Terminal Classic period.

Terminal Classic activity was also documented in the area of the Central Acropolis. This enormous complex consists of a huge platform which supports nine palace structures and several smaller rooms delimiting three main patios (North, South and East Patios). The largest construction of the Central Acropolis is Structure B-15 which consists of four-terraced platform topped by three buildings. Vaulted chambers are located on each terrace of Structure B-15. During the Terminal Classic period a small ritual space was created in the area of the East Patio of the Central Acropolis by cutting out the older Late Classic and Preclassic floors. It consisted of an oval sunken room or depres-



57. Naranjo. Plan of Quadrangle A-19 showing location of looters' trenches and excavation units (redrawn by K. Radnicka after Aquino 2007)

sion covered by stucco. On its floor an offering was discovered (no. NR-B-1). This offering consisted of a sculpture representing a potbellied figure and a circular limestone receptacle. It was possible to document several episodes of Terminal Classic activity in the above-mentioned place. One such episode resulted in the deposition of a fragmented sculpture (most probably part of a scepter with the representation of a human figure) on the floor, close to the potbellied figure. The second episode included the covering of the above-mentioned sculptures by a floor and subsequently setting up a plain altar (no. NRAP-012) over it. The third ritual episode documented at this place included the setting up of two other plain altars (nos. NRAP-013 and -014) (Fialko 2006: 329–330).

According to Fialko (2006: 330) the most important construction of the Central Acropolis (Structure B-15) also underwent important remodelling during the Terminal Classic period. It included the construction of walls inside various rooms of this complex, leading to the reduction of their interior space. In some cases annexes were also added to the existing buildings.

Significant Terminal Classic occupation was also documented in Group A. In a Triadic Acropolis A-15, Terminal Classic debris with abundant ceramic material was discovered mainly within the surroundings of Stelae 1, 2 and 3 – which were erected in front of the main pyramid of this group (Structure A-15) (Fialko et al. 2003: 6). Inside the south-western room of Structure A-15 a problematical ceramic deposit from the Terminal Classic period was discovered. It was deposited in an oval cut (0.50 m long x 0.46 m wide x 0.20 m deep) made into the building floor. Besides ceramics, the cut contained an

ashy matrix and charcoal. This is probably a trace of ritual activity left by the Terminal Classic population. The same period saw remodelling of the western room of Structure A-15 which included elevation of the room floor by 0.30 m. Moreover, during the Terminal Classic a wide platform was constructed south of Structure A-15. This platform unified all three structures of the Triadic Acropolis A-15 (Aquino 2007).

Excavations carried out in another complex (Quadrangle A-19) which consists of medium size palace structures located around a courtyard revealed that this area was intensively used during the Terminal Classic period (Fig. 57). Test pits excavated in the courtyard revealed a Terminal Classic midden at least 0.30 m thick, consisting mainly of ash and sherds. The midden contained a significant number of fragments of utilitarian vessels as well as lithic tools (Aquino 2005, Fialko et al. 2003: 5). The midden was probably left by people who lived or/and used the palace structures of this complex. Indeed, few structures of this complex yielded traces of Terminal Classic activity. During this span of time a small platform (Structure A-29) was constructed on the last floor of the north-eastern corner of the patio of Quadrangle A-19 (Fig. 57). It was added to the southern facade of the existing palace A-22. Due to the construction of this platform, access to the patio was reduced to a small and narrow passageway 0.61 m wide. The construction fill of Platform A-29 consisted of soil mixed with medium and small size stones. The platform was faced with cut stones. Its southern wall was constructed with reused stones and still stands up to a height of 0.25 m. At the surface of another building – Structure A-24 (a small platform constructed at the end of the Late Classic period in the southeastern corner of the quadrangle), a significant number of Terminal Classic sherds were also discovered (Fialko et al. 2003: 13). Structure A-25 located at the entrance to Quadrangle A-19 (on an axis with a stairway that leads to this complex) also showed traces of Terminal Classic activity. Structure A-25 consisted of 4 chambers constructed during the Late Classic period. In the Terminal Classic it underwent small-scale remodelling that included the addition of a bench (0.38 m high x 3.70 m wide) to the northeastern part of this structure (Fialko et al. 2003: 16–17). Moreover, during the Terminal Classic period, the southeastern access to the Quadrangle A-19 complex was closed due to the construction of a wall which joined the lower part of Structure A-24 and the northern facade of Structure A-25. To the east of Quadrangle A-19, a Terminal Classic midden over 2 m thick was also found in a collapsed chultun. The chultun was probably used as a refuse dump by people living in the Quadrangle A-19 (Aquino 2005: 246). It should be mentioned that during investigations realized in Quadrangle A-19 a circular, plain banner or marker (diameter of 0.40 m) was also found. This monument must have been an important symbol of social status to the inhabitants of this complex during the Terminal Classic period (Aquino 2007).

According to Fialko et al. (2003: 39–40) evidence of Terminal Classic occupation was also documented in Structure A-18 which is located southwest of Quadrangle A-19. Structure A-18 was constructed during the Late Classic and it consists of a rectangular platform which probably supported a superstructure of perishable materials.

Other traces of Terminal Classic occupation were documented in the West Acropolis. This complex consists of a large platform that supports 4 patios with 7 palace structures. In 2003, two test pits were excavated in the platform of the West Acropolis. One of them showed evidence of occupational sequence corresponding to the Terminal Classic period (Fialko et al. 2003).

Excavations in the area of Triadic Acropolis C-10 showed other important traces of Terminal Classic occupation. This complex is made up of one large pyramid (Structure C-10) which is flanked by two smaller platforms (C-11 and C-12). A small platform (Structure C-13), probably having a ritual function is located at the centre of a plaza of this complex. A test pit made in the plaza of the Triadic Acropolis C-10 yielded a construction fill with small and medium size stones and a significant number of Terminal Classic sherds (Fialko et al. 2003: 52). Thus, the complex or at least some of its structures might have been occupied (or even rebuilt) during the Terminal Classic period.

Architectural activity dated to the Terminal Classic period was also documented in Triadic Acropolis D-1 which is located at the top of a hill, at the end of a causeway leading to this spot from the Central Plaza. During investigations at the end of the causeway, a wall constructed during the Terminal Classic which closed access to this complex from the south was also documented (Aquino 2007).

One of the last architectural enterprises carried out in Naranjo was documented in the western ballcourt. This consists of two long structures (B-32 and B-33). During Fialko's investigations, which included excavation of several test pits and research in the looters' trenches dug into both structures, two construction stages of the ballcourt were detected; the first dating to the 8-th and the second to the 9-th century. According to Fialko (2004b: 184) the second stage can be dated to the final part of the Tepeu 2 or to the beginning of the Tepeu 3 phase.

Excavations carried out in Naranjo indicate that during the Terminal Classic period, several monuments were relocated from unknown spots to new locations. During this period, Early Classic Stela 44 was set up in front of Structure B-18 (which also showed evidence of Terminal Classic occupation). Some Terminal Classic sherds were discovered close to Stela 44 and they were probably part of a dedicatory offering left by the late Maya (Fialko et al. 2004). Two other Early Classic monuments, Stela 38 and Altar 1 were also relocated and placed in the area of Acropolis D-1. All of the above mentioned monuments are related with the reign of the Early Classic king Aj Wosal (Fialko 2005a: 229). Their relocation and rededication during the Terminal Classic most probably reflects the existence of ties and connections of the late Naranjo elites with this early king.

Finally it should be mentioned that recent investigations realized in the southwestern periphery of Naranjo documented very important evidence of construction activity and occupation dated to the Terminal Classic period (Fialko et al. 2007). This area might have been one of the most important spots where Naranjo elites and the lower class population continued their activities through the end of the Classic.

6. Postclassic occupation

Fialko (2006: 330) mentions the discovery (in the area of the Central Acropolis) of one sherd which is either from the Postclassic or from the post-Conquest period.

7. Conclusions

Terminal Classic materials discovered during the 2002 archaeological season at Naranjo were very scarce and they constituted the smallest amount of all the ceramic assemblage recovered during that year (Fialko et al. 2002). However during the 2003 season, more Terminal Classic material was discovered. The largest amount of ceramics from this season (similar to the 2002 season) comes from the Late Classic period. However, material from the Terminal Classic period discovered in 2003 was relatively high (29.83% of the total ceramic assemblage). All collected data indicate that during the Terminal Classic period, Naranjo lost its prestige and political-economic status (Aquino 2007). If we compare Naranjo's development between the Tepeu 2 and 3 times, it is clear that the city suffered a decline in construction activity and a demographic loss, although a significant number of people continued to occupy the site during the Terminal Classic. This occupation is concentrated mainly in the central and western parts of the site epicentre as well as in the southwestern periphery of the site. Some of the inhabitants might have inhabited old temples and administrative complexes as is indicated from evidence of Terminal Classic occupation documented from Temple A-18 and Quadrangle A-19. In sum, architectural activity at Naranjo during the Terminal Classic period was limited to minor remodelling and the construction of small platforms and walls resulting in increased restriction in accessing the respective complexes and buildings. It was mainly documented in the quadrangle complexes of Acropolis B-5 and Group A-19, where limited remodelling was done. This work involved recycling material from the collapsed or destroyed sectors of the site (Fialko 2005a: 229). Other complexes which saw small scale architectural activity are the Triadic Acropolises A-15, D-1 and C-10.

It is important to mention that Terminal Classic material was in many cases detected in the humus of test pits, in the fill of the looters' trenches and in the rubble of some chambers. Archaeological context of these finds may suggest that some structures were already ruined during the Terminal Classic period.

Of major importance is an absence in the ceramic assemblage of Naranjo of Fine Orange and Fine Gray vessels (Aquino 2007). This indicates that during the Terminal Classic period Naranjo lost control of and access to the most important trade routes.

YAXHA

1. Location

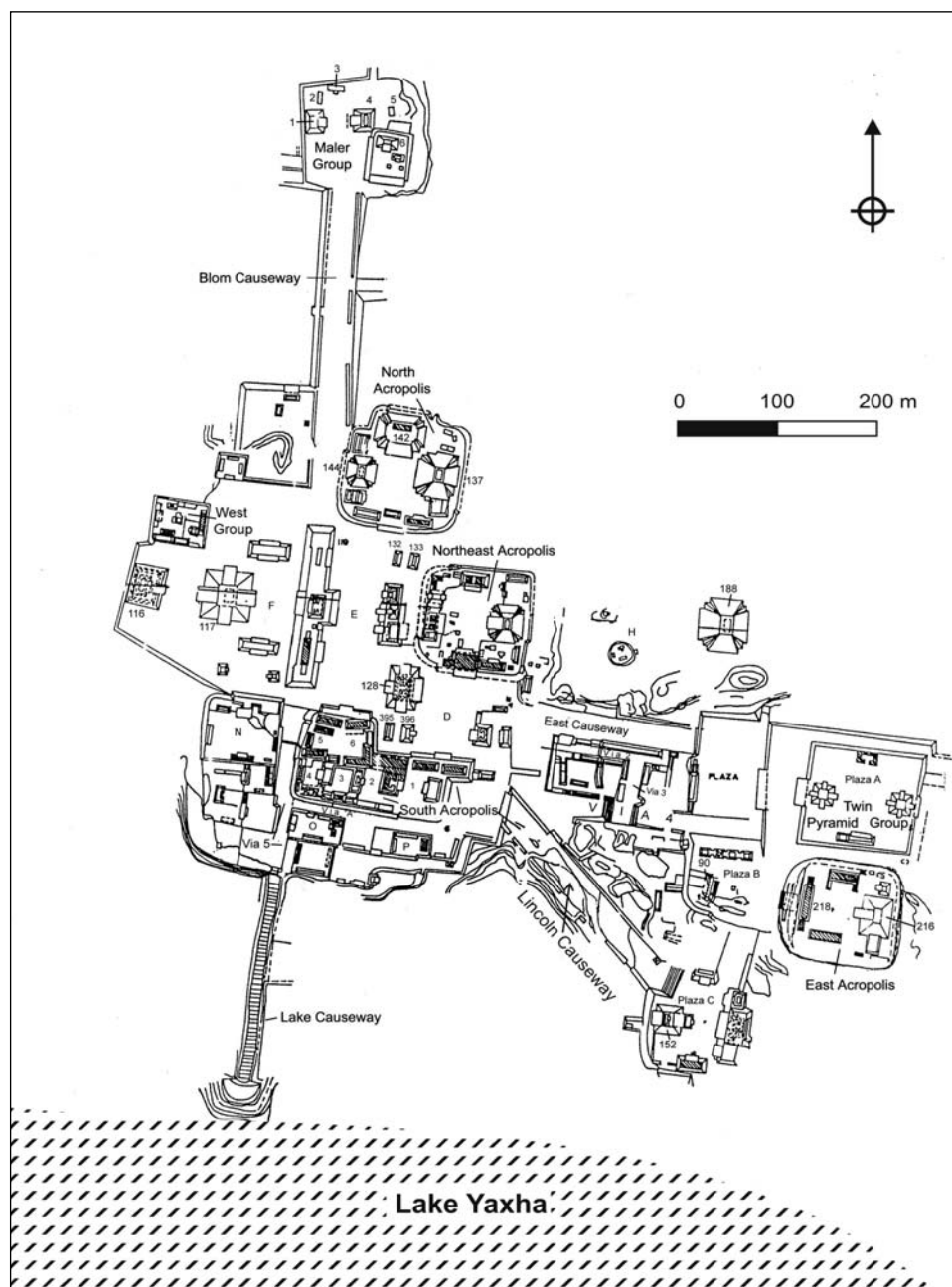
The site of Yaxha is located on a hill which extends along the northern shore of Lake Yaxha. Its geographical coordinates are: latitude 17° 04' 10" and longitude 89° 24' 00".

2. History of investigation

Teobert Maler was the first to bring this site to the attention of the scientific world in 1904. Maler published photographs of several stelae and prepared the first plan of Yaxha which included structures located in the eastern portion of the site (Maler 1908). Between 1914 and 1932, Yaxha was visited by different scientists, among them Sylvanus Morley (in 1914 and 1915), Frans Blom (in 1924 and 1928), Percy Madeira (in 1930) and by William Lincoln (in 1932), who is credited with preparing a new plan of the site. In 1960, Yaxha was visited by William Bullard who explored the local area (Bullard 1970). In the 1960s Ian Graham and Merle Green came to the site. They focused on the study and documentation of inscribed monuments. Between 1969 and 1972, Yaxha was investigated by Nicholas Hellmuth who carried out excavations and prepared, along with Miguel Orrego, a map of the site (Hellmuth 1993). Between 1980 and 1982, the area located in the vicinity of the Lakes Yaxha and Sacnab was investigated by Don Rice and Prudence Rice as part of the Central Peten Historical-Ecology Project (P. Rice 1986; D. Rice 1986; Rice and Rice 1980, 1990). Restoration work, aimed at preventing the most unstable buildings from collapse, was started at Yaxha in 1988 by IDAEH. In 1991 the Triangulo Project started archaeological investigations at Yaxha and focused on excavating a large pyramid (Structure 216) located in the East Acropolis. Between 1995 and 1997, a vast test pitting programme along with excavations of the chultuns and investigations in the area of Lake Causeway and Vía 5 were carried out at the site. In the ensuing years, excavations were realized in the area of the North Acropolis and the Maler Group. Between 1998 and 2004, the PDS Project (Pograma Desarrollo Sostenible de Peten, Componente II) carried out a limited excavation and an important renovation programme for the Blom Causeway and for buildings located in the North Acropolis and Maler Group. Investigations undertaken in these complexes by the PDS and the Triangulo Project focused mainly on restoration. Thus, archaeological data collected during these research projects were in some cases scarce and insufficient to reconstruct a history of the architectural stages of individual structures. In 2005 new investigations led by the PDS Project started in the following complexes and buildings in Yaxha: West Group (Structures 103 and 109), platform of the South Acropolis and area of Patio 4 of the same complex, one ballcourt (Structures 395 and 396) and Structures 375, 152 and 90. This research was completed in 2006. During this time, the above-mentioned constructions and complexes were excavated and restored. Moreover, between 2002 and 2004, IDAEH investigated three constructions in the East Acropolis complex (Structures 217, 218 and 219).

3. Description of the site

The site of Yaxha is made up of approximately 500 structures. The eastern sector of the site consists of the East Acropolis (dominated by a huge pyramid – Structure 216), the Twin Pyramid Group and a few plazas: among them Plaza C surrounded by large pyramid-like structures (Fig. 58). The East Causeway and Lincoln Causeway connect this sector with the central part of the site. The long Lake Causeway (Calzada del Lago)



58. Yaxha. Plan of the site (after Hermes, Noriega and Calderón 1997: fig. 2 modified by A. Danecki)

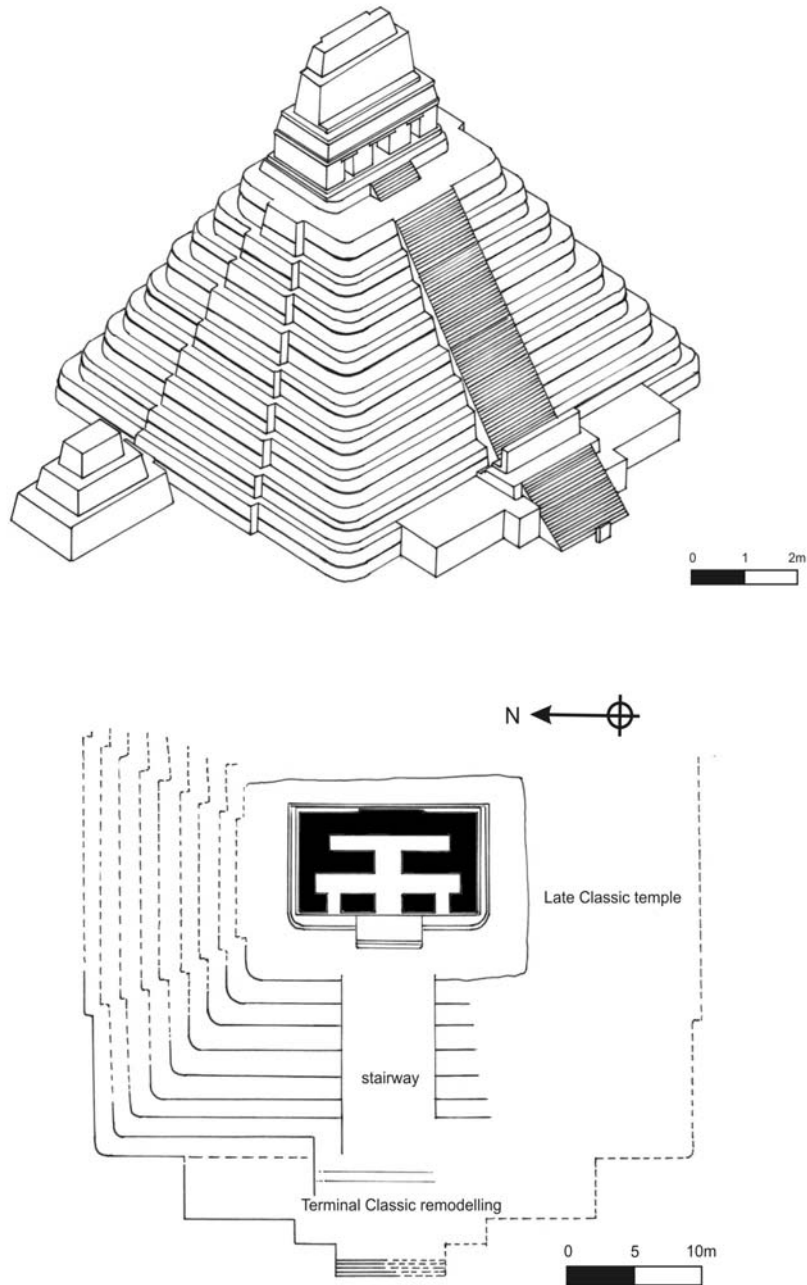
probably served as the main way and entrance to the site for the people who arrived by land or over the lake from the south. The Lake Causeway is connected with Vía 5 which goes past the huge architectural complex of the South Acropolis. The South Acropolis consists of 6 courtyards surrounded mainly by palace structures. It functioned as the main residence of the local elites. Other monumental complexes are situated to the north and northwest of the South Acropolis, among them the E-Group complex, Northeast Acropolis and North Acropolis with large pyramids built in a triadic pattern and several palace structures. The central part of the site is connected by the wide Blom Causeway with the northernmost complex of the Maler Group which is made up of two plazas, pyramids and low structures of habitational character.

4. An outline of the prehispanic occupation at the site

Yaxha was first settled in the Middle Preclassic. According to Hermes (2000a: 279), examples of ceremonial architecture dating to the final part of this period may have existed in the North Acropolis and Plaza F (area of the E-Group complex). During the Middle Preclassic, the bedrock on which the East Acropolis is located was leveled in order to construct a plaza floor. A multiple burial accompanied with one vessel was discovered below this floor (Hermes 2000a: 279).

The Late Preclassic saw extensive development of the site. In the North Acropolis, an enormous complex consisting of three pyramids was built in a triadic pattern (Structures 137, 142 and 144). During this period, the first versions of the Blom Causeway and Lake Causeway were also built. Both causeways were elevated approximately 0.50 m above the surrounding terrain level and had sloping walls. Their maximum width was 10 m (Hermes and Ramos 2004; Hermes, Morales and Möllers 1999: 116). The first version of the two pyramids (Structures 4 and 6) in the area of the Maler Group as well as the first architectural stage of Structure 216 (216 Sub-1) located in the area of the East Acropolis, were all built during the Late Preclassic. According to Hermes (personal communication, 2003), the E-Group complex (or at least its first versions) along with a huge separated pyramid (no. 188) located in the eastern part of the site were probably also built at that time. New investigations which were realized at Yaxha by PDS indicate that the first versions of Structure 1 (a pyramid located in Maler Group), Structure 152 (pyramid structure located in the area of Plaza C) and Structure 90 (low platform located in Group B) were also constructed during the Late Preclassic period, (Bernard Hermes, personal communication, 2006). In sum, the size and amount of Late Preclassic architecture discovered so far at the site indicate that during this period Yaxha was one of the largest and most powerful centres in the northeastern Peten.

The initial part of the following Early Classic period is represented by two new architectural stages of Structure 216 (Sub-2 and Sub-3). A palace construction (Structure 218) is located opposite to Structure 216. Its first version was also constructed in the first part of the Early Classic. It consisted of a single vaulted chamber which subsequently (still during the Early Classic period) underwent limited remodelling. The same period also saw the construction of two other palace buildings (nos. 217 and 219) at the northern and southern extreme of Structure 218 (Morales and Valiente 2006).



59. Yaxha. Reconstruction and plan of Structure 216 showing Terminal Classic remodelling (redrawn by K. Radnicka after Hermes, Noriega and Calderón 1997: figs 15 and 17)

Many stelae representing the typical Early Classic style may be ascribed to the same time span (e.g. Stelae 2, 4, 7, 11, 32 and 41). One of them (Stela 11) was discovered at the entrance to the East Acropolis complex and it represents an individual dressed in a typical Teotihuacan costume (possibly Siyaj K'ak' himself) [Stuart 2005]). This monument indicates that the Teotihuacan related *entrada* of 378 might have had an important impact on Yaxha.

It seems that at the beginning of the Early Classic period, all religious activity moved from the North Acropolis to the East Acropolis where Structure 216 underwent a significant remodelling programme and several new constructions were built (Structures 217, 218 and 219). Archaeological materials from the final part of the Early Classic (Tzakol 3) as well as from the first part of the Late Classic (Tepeu 1) are almost absent at Yaxha. At that time, while Yaxha underwent a cultural hiatus, the neighbouring site of Poza Maya flourished. It is possible that the crisis observed at Yaxha was at least in some part caused by an earthquake since profound chasms were documented during excavations in the East Acropolis and other structures at Yaxha and can be dated to the final part of the Early Classic period (Morales and Valiente 2006).

The second part of the Late Classic period (Tepeu 2) saw the greatest development of the site. Almost all of the complexes investigated at Yaxha showed evidence of very strong architectural activity at that time. A huge nine-terraced pyramid (new version of Structure 216) was constructed in the area of the East Acropolis (Figs 59 and 88). Other constructions of this complex (Structures 217, 218 and 219) also underwent a significant rebuilding programme. In the Maler Group, we see the construction of a few new buildings as well as a rebuilding process of all existing structures. The Lake Causeway was widened and at its northern end, a small construction which functioned as a point of control for entry was built. One of the greatest architectural enterprises that were carried out at Yaxha during the Tepeu 2 phase was the construction of the Twin Pyramid Group, north of the East Acropolis. Inside of this complex, Stela 13 was dedicated in 793 by one of the most important Late Classic Yaxha rulers K'inich Lakamtun. A vast test pitting programme undertaken in Yaxha indicates that many other complexes were built or rebuilt at this time.

The Terminal Classic in Yaxha is characterised by significant construction activity in many parts of the site and by the relocation of many existing stelae. The following Postclassic period is represented by very scarce materials that come from the eastern sector of the site, the Lake Causeway, the Blom Causeway, the Maler Group and a few chultuns. The main Postclassic occupation is seen in several neighbouring sites located on the islands of Lake Yaxha, including the Topoxte Island (see: Wurster 2000).

5. Analysis of Terminal Classic occupation at the site

The Terminal Classic period in Yaxha saw significant construction activity. This was documented for all of the complexes which have so far been investigated; among them the Maler Group, North Acropolis, East Acropolis, West Group, Groups B and C and the area of Lake Causeway. Other types of Terminal Classic cultural activity are related with the relocation of many earlier stelae, which at that period were set up in new locations.

5.1. Relocation of the stelae

Archaeological investigations carried out in Yaxha indicate that during the Terminal Classic, many stelae of Early or Late Classic date were moved from their original position to other places in which significant Terminal Classic activity was documented.

Stela 7 was relocated and set up in front of the stairway which led from the south to the summit of the North Acropolis, where a few palaces were constructed during the Terminal Classic. Stelae 8, 9 and 10 were also relocated to the area of the Maler Group and set up in front of Structure 4. The same may be said of Stela 13 which was moved during that period to the Twin Pyramid Group and Stela 41 which was set up in front of a new version of Pyramid 216-1a (Hermes 2001: 181; Hermes et al. 1996: 7).

5.2. Terminal Classic architecture

East Acropolis

In the area of the East Acropolis, a large pyramid called Structure 216-1 underwent significant remodelling during the Terminal Classic. Structure 216-1 was built in the second part of the Late Classic period. It was a nine-terraced pyramid topped by a temple with two chambers and three accesses. The building was 23.25 m high and on its western facade, it had a stairway 7.50 m wide (max. wideness) leading to the top. During the Terminal Classic, on the first terrace of the pyramid, a low platform with a stairway and a small wall on top of it was built (Figs 59 and 88). The platform was 11.10 m long, 5.30 m wide and was 3 m high at its maximum height. Due to the construction of a vertical wall at the top of this platform, one had to walk round it to reach the top of the pyramid. Some remodelling work is seen on the pyramid stairway upto the level of the fourth terrace, where numerous sherds of the Terminal Classic date were found (Hermes et al. 1996: 7). During the same period, Stela 41, which was relocated from an unknown place, was set up in front of Structure 216. In order to reset it, the Maya made a hole in the existing plaza floor and then covered the monument at its base (Hermes et al. 1996: 7; Hermes, Noriega and Calderón 1997).

Recent investigations carried out in other buildings of the East Acropolis (Structures 218, 217 and 219) revealed other evidence of Terminal Classic activity in that complex. In the Tepeu 2 phase all three structures were connected, creating one long palace construction with several chambers. Structure 218 was located in the centre while Structures 217 and 219 adjoined it from the north and south. This palace complex had 15 doorways on its western facade leading into several chambers located on a platform. Access to the chambers of Structures 217 and 219 was located on the eastern facade. Additionally, on the same facade during the Tepeu 2 phase three separate rooms were added. Excavations at the end of 2004 and the beginning of 2005 by Paulino Morales in the area of this structure indicate that it underwent significant remodelling during the Terminal Classic period. This period saw the construction of one building roofed by perishable materials on the platform of Structure 218 as well as the addition of masonry blocks at the base of Structures 217 and 219. Moreover, in the southeastern sector of Structure 219, two small platforms were added during the same period. According to Morales, during the Terminal

Classic period the eastern facade of Structure 218 as well as the facades of Structures 217 and 219 were partly or completely dismantled. The reused material was subsequently used for the remodelling or construction activity that was documented for this area from the Terminal Classic period (Morales 2005). It should be also mentioned that the chambers of Palaces 217 and 219 were sealed during the final part of the Late Classic and in the Terminal Classic.

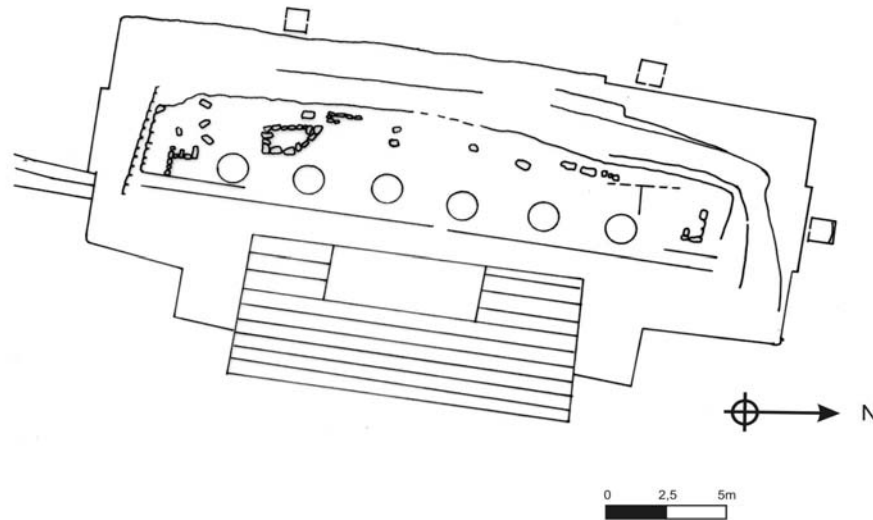
Morales (2005) connects the rendering of all graffiti documented in the interior of Structure 218 with the Terminal Classic period. Ashy matrix related with the Terminal Classic occupation was also detected in the vicinity of Structure 218 along with many grinding stones and numerous fragments of domestic vases (including many fragments of Fine Orange class). Morales also assumes that several unequipped burials discovered south of the Late Classic elitist burial (Burial YX-08 which was deposited in front of the main access to Structure 218), may be also dated to the Terminal Classic period (Morales and Valiente 2006).

According to Hermes and Martínez (2005), a C-shaped structure located at the northern end of the East Acropolis as well as some low structures situated in the northeastern and southeastern corners of the same complex can also be dated to the Terminal Classic period. However, further investigation is needed in order to confirm the latter supposition.

Plaza B and Structure 90

Plaza B is located west of the East Acropolis. It is delimited from the north by Structures 91–94, from the west by Structure 90 and from the east by the East Acropolis complex. Structure 90 of Plaza B was excavated in the 1970s by Nicholas Hellmuth (1993: 23). His research indicates that this structure consisted of a two-terraced platform topped by a single range building that had 6 columns in its facade. The columns formed 7 doorways. Two of the doorways which were cleared during excavations were approximately 1.9 m wide. The columns were over 1 m in diameter and were faced with small, well-worked stones averaging 4 x 12 x 7 cm in size (Hellmuth 1993: 23–24). Similar, small stones were used for the construction of the superstructures of Structures 1 and 128 at Yaxha (Hermes and Martínez 2005). No vault stones were found inside Structure 90 and Hellmuth (1993: 23–24) assumed that the upper part of the walls as well as the roof were made of perishable materials. He also notes that Structure 90 is similar in its plan to Chichen Itza Structure 5C2. Numerous examples of Terminal Classic pottery (Moulded-carved sherds) were also found on the room floor of Structure 90 during investigations. Hellmuth (1993: 23) assumed that they “postdate the erection of the building”.

Recent excavations of Structure 90 by Bernard Hermes from the PDS Project revealed two architectural stages of this construction. During the first stage dated to the Late Preclassic period, a rectangular construction 28 m (N-S) x 8 m (E-W) was built. It was a three-terraced platform with round corners. A stairway leading to the top of the platform was located on its eastern facade. Most probably the platform of Structure 90 was plain at the top. The next architectural stage of Structure 90 is dated to the Terminal Classic period. During this stage a new version of the platform 29 m long (N-S) and 10.50 m wide (E-W) was built (Fig. 60). The platform had round corners and its walls



60. Yaxha. Plan of Structure 90 (redrawn by K. Radnicka from original drawing made by C. Rax Pacay, PDS – Yaxha)

were in *talud* style. A stairway 14.55 m wide and consisting of nine steps led to the summit of the platform from Plaza B. Moreover, a large 6.50 m wide stairway block was located in the centre of the stairway. At the summit of the basal platform of Structure 90 a smaller platform 24.50 m long and 4.50 m wide was constructed. Hermes' excavations confirmed that there was a single range building that had 6 columns in its facade at the top of this platform. The diameter of the columns varied between 1.30 m and 1.68 m and Hermes found them preserved up to a height of 0.46 m. Moreover, in the northern, southern and western part of the upper platform, remains of the walls of a single-range building survived. The maximum thickness of the walls was 0.50 m and it seems that, as Hellmuth wrote in his report (Hellmuth 1993), only the lower part of the building had masonry walls while the rest was built from perishable materials. In front of the stairway of Structure 90 three plain stelae (A6, A7 and A8) and one plain altar (paired with Stela A7) were erected.

It should be stressed that the plan of Structure 90 with columns on its main facade is very similar to "open saloon" buildings, typical for the Postclassic architecture (e.g. Topoxte).

Area of the Lake Causeway and Vía 5

Important architectural changes are also seen during the Terminal Classic in the area of Lake Causeway with its northern extension called Vía 5 which probably constituted the main access to the site. This road began to be used during the Preclassic period when its first version, 10 m wide with sloping walls was constructed. In the Late Classic, parapets that limited the eastern and western sides of the causeway were built. Close to the

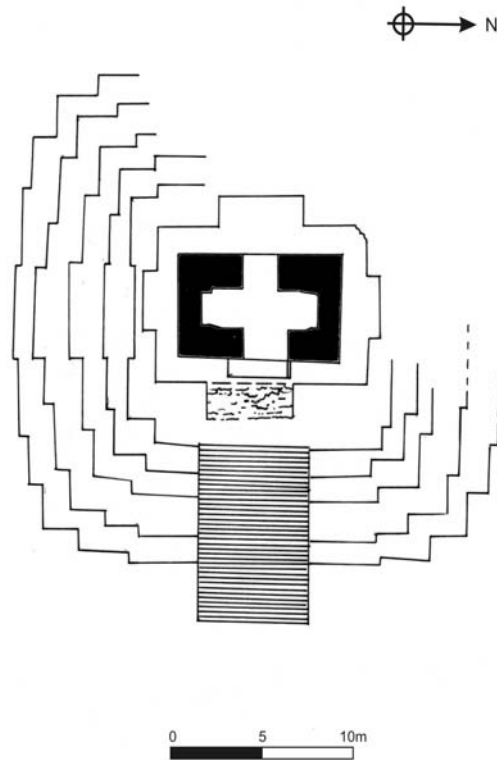
lake shore, at the southern end of the causeway, a small platform covered with plaster stucco was built and might have served as a pier. In the area where the causeway connects with Vía 5, a construction that reduced the space of the entrance to a narrow passageway was built. According to Hermes, Morales and Möllers (1999: 117), this construction may have served as some sort of control point for people entering the site. It consisted of a small entrance located close to the western limit of the causeway. This entrance gave way to a small space 2 m wide which led from the north to another area which at its northern side had a stairway consisting of 2 steps. The stairway led to the southern limit of Vía 5 and thus to the area of the site of Yaxha.

During the Terminal Classic, construction built between the causeway and Vía 5 was completely levelled and covered by a fill of stones and clay mortar. Hermes (Hermes, Morales and Möllers 1999: 117–118) argues that the elimination of this point of control was due to the Yaxha elites wanting to attract people who were dispersed after the collapse of the other big Maya centres. These people might have provided additional labor for the local elites.

Structure 1

This structure is located at the western side of the plaza of the Maler Group, opposite Structure 4. It was partly excavated by Paulino Morales and subsequently by Bernard Hermes as part of the PDS Project (Hermes and Martínez 2005). Investigations by Bernard Hermes resulted in the distinguishing of five architectural stages for this construction. The first two stages are dated to the Late Preclassic period but they are poorly known. The third and fourth stages are from the Late Classic and finally the last stage is dated to the Terminal Classic period. Hermes' excavations indicate that during the Late Classic period Structure 1 consisted of a four-terraced pyramid platform (very similar in form and size to the platform from the last architectural stage) with a stairway on the eastern facade. Most probably, each terrace had walls in *talud* style. The pyramid platform supported a smaller platform with profiles made up of a sloping lower member or *talud*, a vertical middle panel or *tablero* and an outward-sloping upper member or reverse *talud* (Figs 90 and 91). This platform had four stairways (one on each facade). Two stairways on the eastern and western facades were later covered by wider Terminal Classic stairways constructed from small well-worked stones (see below) while the northern and southern stairways were covered by solid masonry blocks during the Terminal Classic. The *talud* of the platform was embellished with representations of a Venus star which partly survived on the eastern facade (Koszkul, personal communication, 2005). The style of the platform as well as iconographic motifs from its *talud* are very similar to Structure 5D-43 from Tikal. The platform also has very close analogies to the Epiclassic buildings from Xochicalco and El Tajín which very frequently bore *talud-tablero*-reverse *talud* motifs on their facades. Investigations by Bernard Hermes on top of Structure 1 indicate that the *talud-tablero*-reverse *talud* platform supported a small room during that time (final part of the Late Classic). Only a small part of its walls (0.46 m high) survived, as a result of construction modification during the next architectural stage described below.

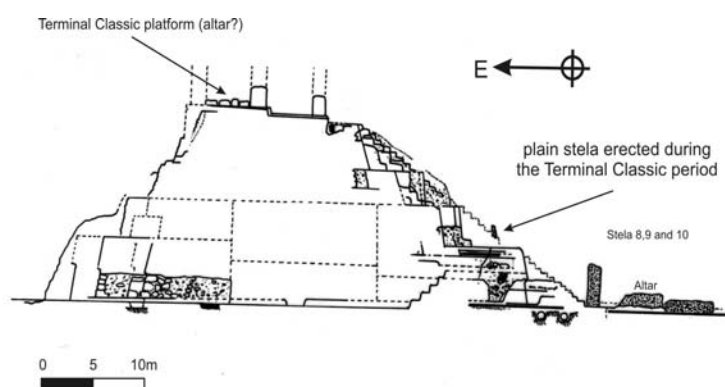
During the Terminal Classic, the pyramid platform was slightly modified. The first (2.10 m high) and the fourth terraces (2.41 m high) had walls in *talud* style while the



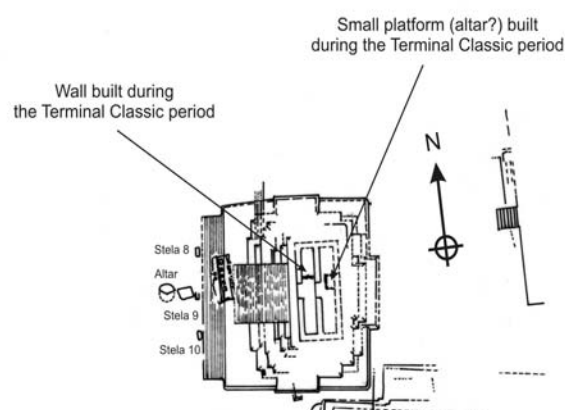
61. Yaxha. Plan of Structure 1 (redrawn by K. Radnicka, PDS – Yaxha)

second (2.13 m high) and the third (2.51 m high) terraces are almost vertical on the eastern and western facades of the platform. The stairway leading to the top of the pyramid platform was 6.09 m wide and consisted of 38 steps (Figs 61 and 89) (Hermes 2006a).

During the Terminal Classic period, on the top of the platform with *talud-tablero*-reverse *talud* profile, a new chamber was built. It had a stone vault and two doorways from the east and west. The interior of the chamber measured 6.61 (N-S) x 1.93 (E-W) and its doorways were 1.86 m (western doorway) and 1.84 m (eastern doorway) wide. The walls of the chamber were between 1.71 and 1.77 thick (Fig. 61). Moreover, this period saw the construction of new versions of stairways leading to the summit of the *talud-tablero*-reverse *talud* platform from the east and west. These Terminal Classic stairways covered the older ones and they also partly covered the facade of *talud-tablero*-reverse *talud* platform with its Venus decoration. On the other hand the northern and southern stairways of the platform were covered with solid masonry blocks. The above-mentioned chamber and the stairways were constructed from very small well-worked stones which were mixed with mortar (Figs 91 and 92). Another building constructed in Yaxha with the same technique is still seen on the summit of a large unexcavated pyramid (Structure 128). We can find examples of the same architectural technique in the area of the southeastern Peten (Mopan Valley) as well as in Naranjo where it was used to



Structure 4, Maler Group



62. Yaxha. Plan and section of Structure 4 (redrawn by K. Radnicka after Morales 2000: figs 2.6 and 2.8)

construct several structures during the Terminal Classic (Bernard Hermes, personal communication, 2003).

Structure 4

Structure 4 is located at the eastern limit of the Main Plaza of the Merwin Group, close to Platform 6 and opposite Structure 1.

The first version of this structure dates to the Late Preclassic. It was successively rebuilt during the course of the Classic period. In its final form, during the Late Classic, Structure 4 consisted of four-terraced platform with a stairway on its western facade (Fig. 62). The platform measures at its base 25.15 (N-S) x 24.25 (E-W). The eastern, western, northern and southern facades bore four apron moldings each. On top of this pyramid platform, a temple with two parallel and interconnected chambers was con-

structed in the Late Classic period. The interior space of the chambers is 11.50 m long (N-S) and 1.60 m wide (E-W). Vault stones were not discovered in this area during excavations and evidence seems to indicate that this temple was roofed by perishable materials.

During the Terminal Classic, inside the eastern chamber of Structure 4, a small quadrangular platform which probably served as an altar was built (Morales 2000: 12). Additionally, in the northern section of the western chamber a bench 0.40 high was constructed. In this area, a layer of ash and burning was also discovered, suggesting that rituals or other activities that involved burning occurred here.

During the Terminal Classic two plain stelae were set up in the area of Structure 4. One was located in the central sector of the superior terrace of the platform and another on the stairway on the level of the second terrace of Structure 4 platform (Morales 2000: 10–12).

According to Hermes (personal communication, 2003), the Terminal Classic also saw some small-scale remodelling of the first terrace of the Structure 4 platform. Based on the archaeological material which was recovered during the reconstruction of the southern facade, Hermes suggests that the first terrace was enlarged to the west and to the east during the Terminal Classic. The eastern and western facades of the first body might have been remodelled in a similar way.

Structure 6 and other structures of the Maler Group

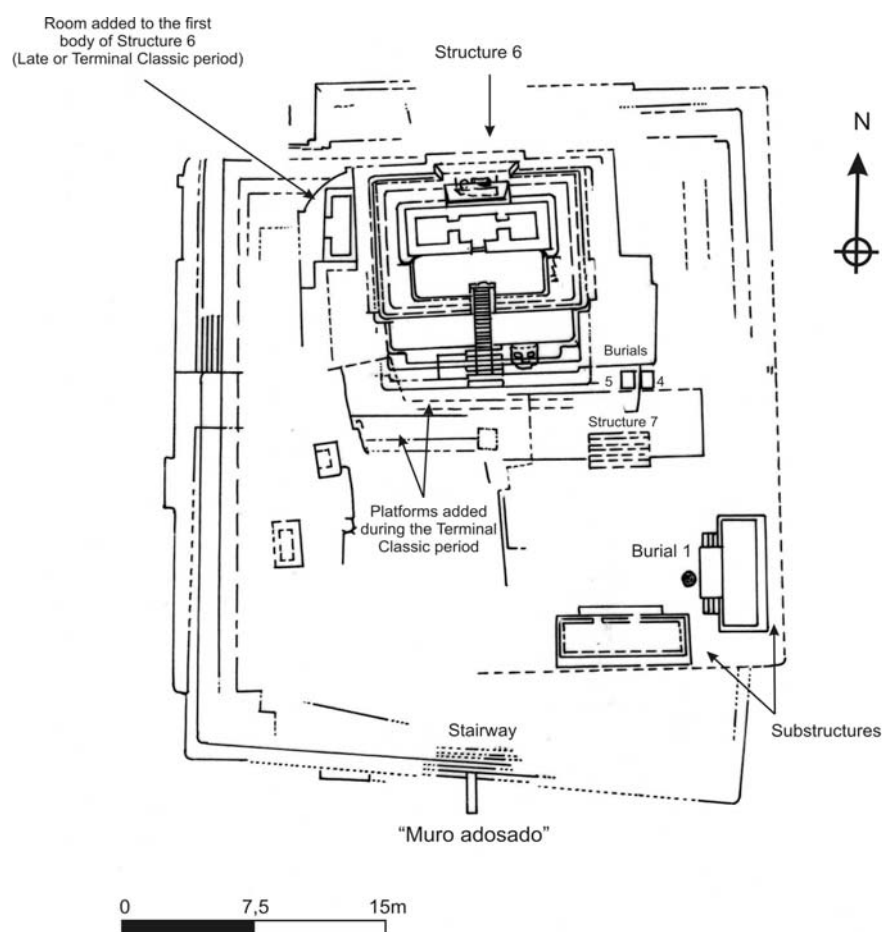
The data collected concerning the architectural stages and the dating of Structure 6 from different publications are contradictory. Therefore, information used here is based mainly on the article by Paulino Morales (2001) presented at the XIV Symposium of Guatemalan Archaeology in 2000 and on the information given by Bernard Hermes. In the Late Classic, Structure 6 was located on a large platform called Platform 6 which measured c.a. 27 (E-W) x 35 (N-S) m and supported another structure (Str. 7) (Fig. 63).

During the Late Classic, Structure 6 was a four-terraced platform. The uppermost terrace had two sections, one lower and the other higher and wider surmounted by a superstructure of three interconnected chambers. The chambers of the superstructure could be reached by a stairway located at the southern facade of the building. On the western side of the first terrace of Structure 6 platform, an additional chamber was also constructed during the Classic period (Fig. 63).

According to Bernard Hermes (personal communication, 2003), during the Terminal Classic the superstructure located at the top of Structure 6 was filled with rubble and sealed. Thus the height of Structure 4 increased, but it is not clear whether another superstructure was built on top of the old sealed chambers and if so, how it could be reached from the area of the fourth terrace.

Moreover, during the Terminal Classic, at the base of Structure 6 several low platforms were also constructed. Their exact function is not known but they may have been related with some kind of religious activity that took place in front of Structure 6.

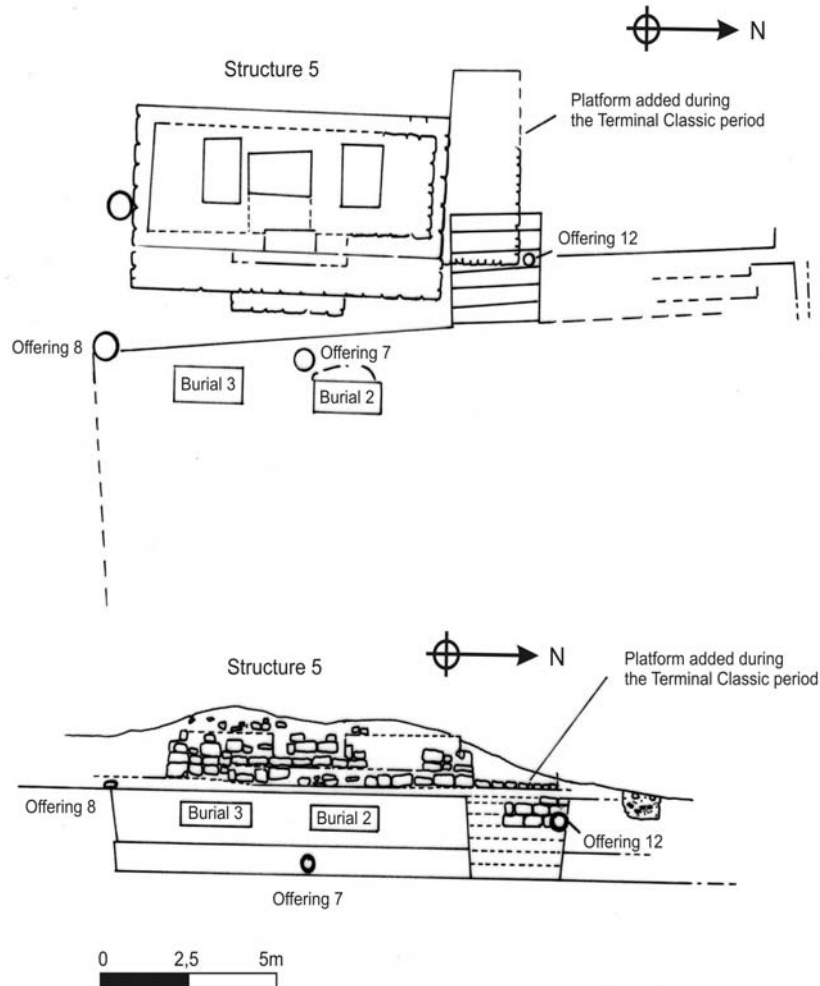
According to Bernard Hermes (personal communication, 2003), a room added on the western side of the first terrace of Structure 6 platform which Morales (2001) dates to the Late Classic period actually might have been constructed during the Terminal Classic.



63. Yaxha. Plan of Platform 6 in Maler Group (redrawn by K. Radnicka after Morales 2000: fig. 2.11)

During the Terminal Classic period, the area of the Maler Group also saw the construction of Structures 5 and 7 which consisted of low two-stepped platforms that were topped by a superstructure of perishable materials (Hermes and Martínez 2005). Small platforms (similar to the platforms constructed in front of Structure 6) were also added during the Terminal Classic to Structures 5 and 7 (Fig. 64). The material used in the construction of these new platforms was taken from the earlier-existing structures (Morales 2001). During the Terminal Classic period several burials (nos. 2, 3 and 4) were also deposited close to Structures 5 and 7 (Figs 63 and 64). Initially it was believed that they were from the Late Classic (Morales 2001). However, verification (made by Bernard Hermes) of research previously carried out in the vicinity of Structures 5 and 7 indicate that the above-mentioned internments are from the Terminal Classic period.

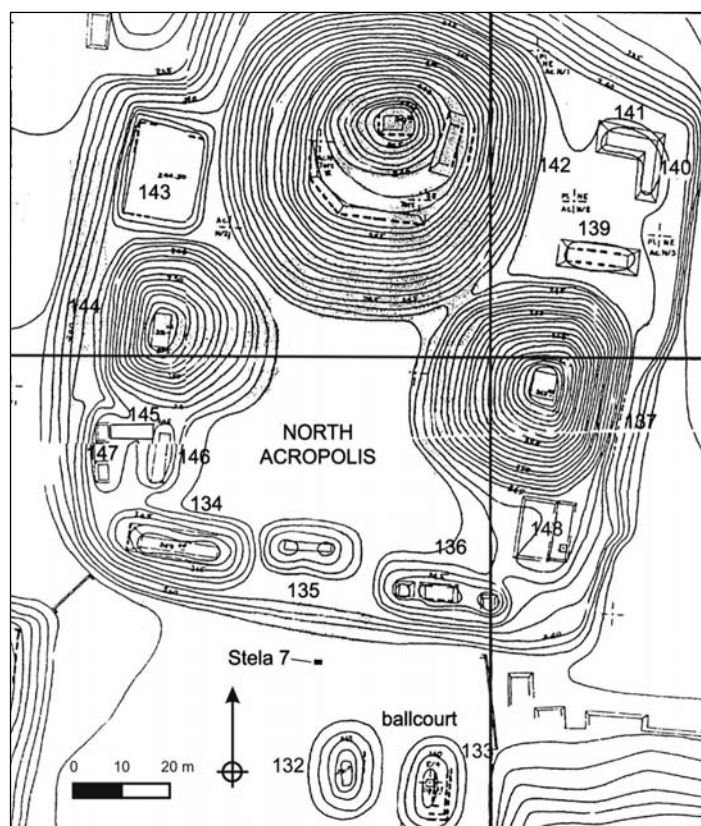
Two other small structures of the Maler Group (nos. 2 and 3) were constructed in the Late Classic and during the Terminal Classic they underwent remodelling which in-



64. Yaxha. Plan and section of Structure 5 showing a small platform added during the Terminal Classic period (redrawn by K. Radnicka after Morales 2001: fig. 2.9)

cluded the re-covering of their facades (western facade of Structure 2 and northern facade of Structure 3) with new masonry. Additionally, long rectangular benches were also added to the base of Platform 6 during the Terminal Classic (Morales 2001: 161).

Test pits excavated in 1996 in the area of the Maler Group indicate that during the Terminal Classic, the plaza floor was subjected to at least one remodelling effort. In Suboperation 72 located close to the south-eastern corner of Structure 1, the layer below the level of paving yielded Terminal Classic sherds. At the same depth, Terminal Classic materials were also discovered in another test pit (Suboperation 73) which was opened close to the south-western corner of Structure 4 (Hermes 1996: 166). A test pit



65. Yaxha. Map of the North Acropolis (map after Morales 2000: fig. 3.4 modified by A. Danecki)

(Suboperation 77) excavated in the plaza lying east of Structure 4 yielded Terminal Classic material associated with the first stuccoed floor (Hermes 1996: 172, 174). Thus, all data indicate that the level of the Principal Plaza and the plaza located east of Structure 4 were paved and therefore elevated by at least 0.20 m during the Terminal Classic.

North Acropolis

Very strong Terminal Classic activity was documented in the North Acropolis where several palaces (Structures 134, 135, 145, 146, 147, 148) and a small platform (Structure 149) were built or rebuilt during that span of time (Fig. 65).

Structure 134

Excavations carried out in Structure 134 revealed five architectural stages: the first stage (134 Sub-1) dated to the Late Preclassic period, the second (134 Sub-2) to the Late Classic period (Tepeu 2) and the last three stages (134-1, 134-2 and 134-2a) to the Terminal Classic period (Hermes 2003).

During the Late Classic period, Structure 134 consisted of a basal platform 30 m (E-W) long, 10 m (N-S) wide and at least 3.60 m high. The platform had a profile made up of a sloping *talud*; a stairway led to the summit of platform from the north side. Excavations failed to find a superstructure on top of the platform.

During the next architectural stage dating to the beginning of the Terminal Classic period, the platform of Structure 134 was enlarged but the old stairway from the previous architectural stage was still in use. The new platform had a profile made up of a *talud* which bore an inset panel in its central part. There is no evidence for the existence of a superstructure on top of the platform during that architectural stage.

During the fourth construction stage (134-2) the platform of Structure 134 was modified. The eastern facade of the platform was replaced. The new facade also had an inset panel in its central part. The inset panel is between 0.07 and 0.10 m deep and 0.91 m high. It stretches all along each wall of the platform. During the 134-2nd stage a new version of a stairway on the northern side of the platform was also constructed.

Additionally, the fourth architectural stage saw the construction of eight chambers on the summit of the Structure 134 platform (Fig. 93). Three elongated chambers were located on the south side of the building (Chambers 1-3), three others on the north side (Chambers 4-6) and two transversal chambers on the east (Chamber 7) and west (Chamber 8) side of the building. Each chamber had its own doorway except Chamber 8 which could be reached from Chamber no. 6. All doorways are on a higher level than the floor of the platform of Structure 134.

During the last construction stage (134-2a), in Chamber 7 a bench that measured 4.70 m (N-S) x 1.90 m (E-W) and 0.40 m high was constructed. It was added to the western wall of the chamber. Moreover, between the jambs of Chamber 8, a step 0.20 m high was constructed and subsequently the chamber floor was elevated till it reached the upper level of this step. During the same architectural stage the plaza of the North Acropolis was elevated by 0.30 m due to the construction of a new floor. The floor partly covered the lower part of the platform along with the lowest step of the stairway of Structure 134 (Hermes 2003, 2006a).

Structure 135

Structure 135 is located at the southern limit of the North Acropolis. Due to advanced decay, it was only partly excavated. Archaeological excavations indicate that Structure 135 consists of a low rectangular platform 15.80 m (E-W) long and 7.10 m (N-S) wide supporting a vaulted chamber with a doorway located on its southern facade. A stairway 7.70 m wide led from the south side to the interior space of Structure 135. Material recovered during limited excavations showed two construction stages of Structure 135 platform, both dating to the Terminal Classic period. In the first version, the platform was 2 m high and bore a moulding located 0.63 m above the level of the plaza. In the second stage, the level of the plaza was elevated by 0.30 m due to the construction of a new floor and the height of the Structure 135 platform was reduced (Hermes 2003, 2006a).

Structure 146 and adjacent Structures 145 and 147

Structure 146 is located in the southwestern side of the North Acropolis, south of the huge pyramid 144. This structure is connected with two other buildings – Structures 145 and 147 which are all located on the same platform (Fig. 66). Excavations have revealed 3 architectural stages of Structure 146: the first (146-1) dating to the Late Classic period and next two (146-2, 146-2a) to the Terminal Classic period.

During the Late Classic, two-terraced rectangular platform measuring 16 m (N-S) x 18.50 (E-W) x 2 m high was constructed. A stairway going to the top of the platform was located in the centre of its eastern side. It consisted of 7 steps. During the Late Classic period this platform was surmounted not only by Structure 146 but its twin – Structure 147 (Structure 145 probably did not exist at that time). Structure 146 was made up of a one long chamber 16.50 m (N-S) long and 2.68 m (E-W) wide. Its interior measurements were: 14.75 (N-S) x 1.70 (E-W). The walls of the chamber were 0.49 m high and it is presumed that Structure 146 had a roof made from perishable materials at that time.

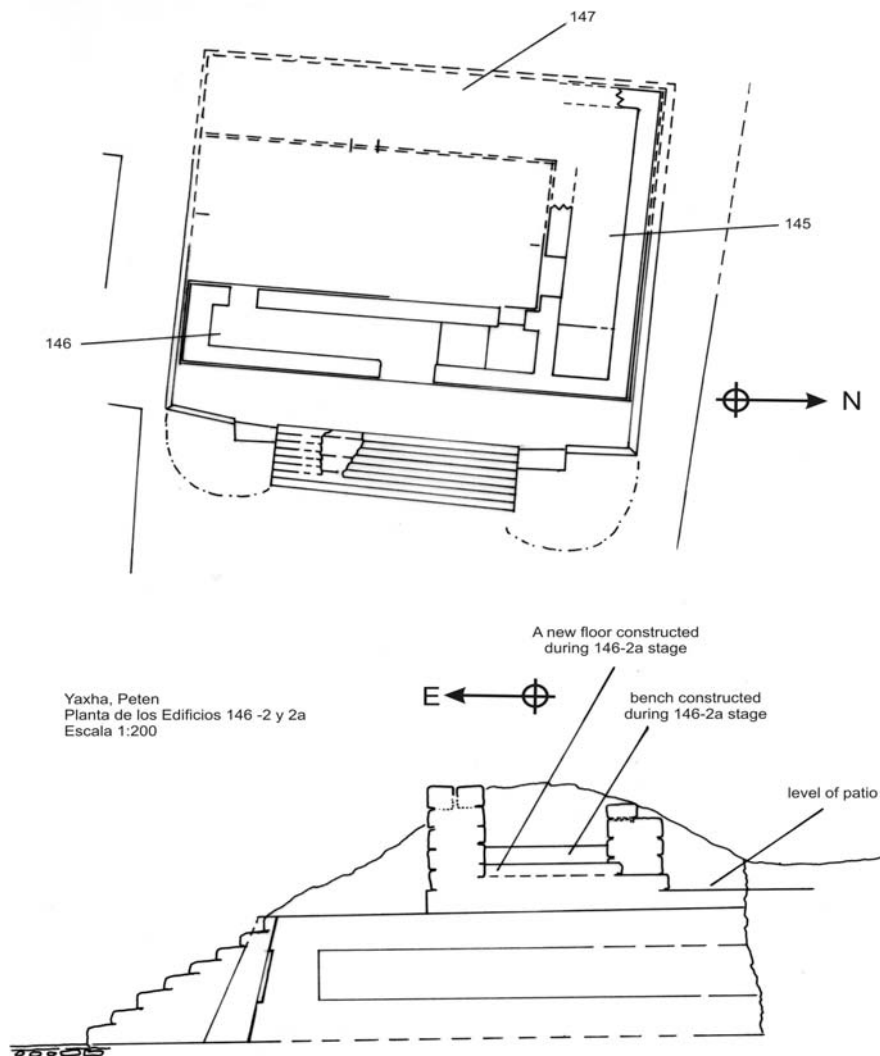
During the second construction stage (146-2), dating to the Terminal Classic period, a new version of the platform was constructed. It measured 20 m (E-W) x 17.25 m (N-S) and was 1.95 m high. The facade of the platform was made up of a *talud* which had an inset panel in its central part (Fig. 66). The same architectural motif is seen on the facade of Structure 134 platform. The second architectural stage also saw the construction of a new version of the stairway which consisted of 9 steps. On both sides of the stairway, in the place where they meet with the platform, two walls 2.60 m long, 1.73 m wide (northern wall) and 2.55 m long, 1.52 m wide (southern wall) were constructed.

Moreover, during the second construction stage a new version of the chamber located at the top of Structure 146 platform was constructed. Its walls were thinner (0.79 m) than that of the previous architectural stage. Vault stones discovered in the interior of the chamber of this building indicate that it had a vaulted roof. During the Terminal Classic period a new building with one long chamber (Structure 145) was also added to the northern extremities of the two existing Structures 146 and 147 in such a way that it joined them. The three structures formed an U-shaped complex around a small patio.

During the last architectural stage (146-2a) the height of the platform of Structures 146, 145 and 147 was reduced by 0.20 m due to the paving of the plaza which stretches in front of this construction. Small elipsoidal platforms (3 m long and 0.40 m high) were also built on both sides of the stairway of the platform (Fig. 66). In the northern part of the interior space of the Structure's 146 chamber, a bench measuring 1.90 (N-S) x 1.70 (E-W) and between 0.43 and 0.23 m high was constructed. In the small space between the bench and the northern wall of Structure 146, a new floor (0.20 m high) was paved.

One offering (no. 26) and one burial (no. 7) are related with the third architectural stage of Structure 146 (see section Terminal Classic burials and offerings) (Hermes 2003, 2006a).

Additional evidence of dense Terminal Classic occupation in the area of the southwestern part of the North Acropolis is seen in two middens discovered between Structure 134 and the platform of Structures 145, 146 and 147 (Midden 1) and between the same platform and Structure 144 (Midden 2). Both middens date to the Terminal Classic and contain sherds (many of them of polychrome ceramic types), fragments of figurines, axes and other miscellaneous artefacts found in an ashy matrix layer mixed with stones (Fig. 101).



66. Yaxha. Plan and section of Structure 146 (redrawn by K. Radnicka, PDS – Yaxha)

Investigations in the North Acropolis by Bernard Hermes indicate that two other structures (Structures 148 and 149) located in this complex were also constructed during the Terminal Classic period. Structure 149 is a small platform 0.30 m high located close to the western extreme of the southern facade of Structure 147. Its corners on the northern side are angular while those on the southern side are round (Bernard Hermes, personal communication, 2005). Structure 148 is located south of a large Preclassic pyramid (designated Structure 137), in the southeastern part of the North Acropolis complex. Limited excavations of this construction revealed that it has a quadrangular platform

1.85 m high with stairways on its western facade. In all probability, it had the same dimensions as the platform which supports Structures 145, 146 and 147 located on the other side of the North Acropolis. According to Bernard Hermes (personal communication, 2005) the platform of Structure 148 did not support any superstructure/s. Between the southern facade of Pyramid 137 and the northern wall of Structure 148, a small passage 1.50 m wide existed.

Structures 137, 142, 144 and the platform of the North Acropolis

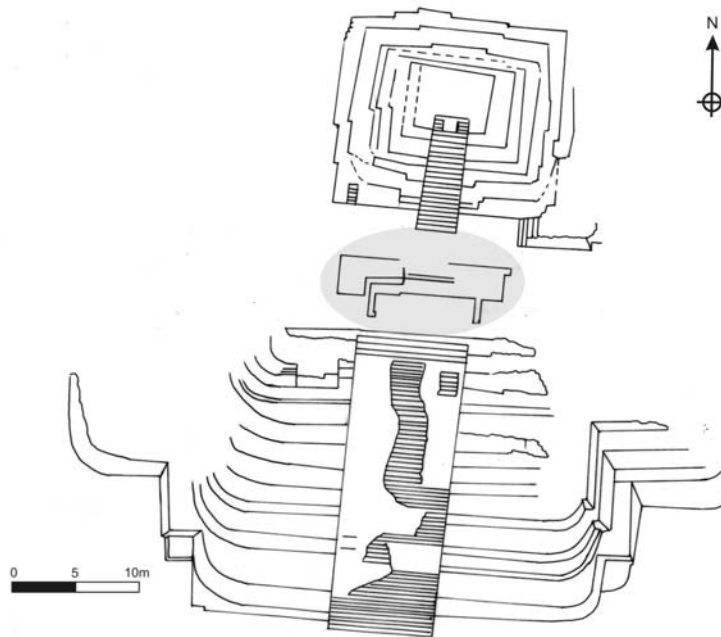
It is possible that during the Terminal Classic period lower parts of three large Preclassic pyramids (Structures 137, 142 and 144) were dismantled to use stone material for the construction of new buildings that appeared at that time in the south part of the North Acropolis. In the places where the stone material was taken from old structures, scattered Terminal Classic ceramics were found.

It should be also mentioned that at the summit of Pyramid 142 vestiges of a small C-shaped structure were detected during the restoration work. It consists of a single room composed of a masonry back wall with two side walls and an open front (Fig. 67). This structure was not excavated but its shape as well as the archaeological material found on its surface indicates that it is of Terminal Classic date (Bernard Hermes, personal communication, 2005). C-shaped structures are known from the Petexbatun region in the 8-th century (Demarest 2004). They appear at a later date in the Central Peten Lakes area during the Terminal Classic and are also typically found in Postclassic architecture (Rice and Rice 2004).

During the PDS project investigations it was also possible to study the architectural stages of the platform of the North Acropolis complex. Excavations by Bernard Hermes in the platform area resulted in establishing eight construction stages (Hermes 2006a). The first five stages are dated to the Late Preclassic period while the sixth is from the Late Classic and finally, the seventh and eighth stages are dated to the Terminal Classic. During the latter period the platform of the North Acropolis achieved its final shape and form. It consisted of two bodies with almost vertical walls (Fig. 93). The wall of the lower body was between 2.05 and 2.08 m high and had a moulding in its upper part. The upper body wall was 1.73 m high and it also bore a moulding in its upper part. The main stairway of the platform was located, as in the earlier stages, at its southern facade and it was 29.30 m wide and consisted of eleven steps. During the last architectural stage, an outset stairway was constructed in the southwestern corner of the platform. In a similar manner during the same period, an outset stairway on the southwestern corner of the South Acropolis platform was built (Hermes 2006a). It is possible that the construction of stairways on the corners of existing complexes was a typical Terminal Classic custom in Yaxha architecture.

Ballcourt 2

Ballcourt 2 is located south of the North Acropolis and is made up of two structures (Nos. 132 and 133) (Fig. 65). During the test pitting programme carried out in Yaxha as part of the Triangulo Project, one test pit was opened in the alley of the ballcourt. It yielded material dating to the Terminal Classic period. According to Hermes and Martínez



67. Yaxha. Structure 142 during the Terminal Classic period. A small construction built during this period at the summit of the Preclassic pyramid is marked in grey (redrawn by K. Radnicka, PDS – Yaxha)

(2005), it is possible that the construction of the ballcourt is related to and contemporaneous with the building programme undertaken in the southern part of the North Acropolis during the Terminal Classic period.

West Group

The West Group is a small elite residence compound located in the western part of the site. It consists of 12 structures grouped around a small plaza. Structures of this compound were heavily looted. Most material recovered during previous investigations (of N. Hellmuth and the Rices) from the piles of the looters' trenches was dated to the Late Classic (Tepeu 2) period. However, some structures of the West Group were surrounded by an ashy matrix with numerous Terminal Classic materials (pottery, including fragments of Moulded-carved ceramics, bones, *manos*, *metates* and other artefacts). These findings suggested to the scholars that at least some structures in this location were inhabited by a Terminal Classic population (P. Rice 1986: 270, 271; Hellmuth 1993: 43).

At the end of 2005 new investigations were initiated in the West Group and included the excavations and the restoration of Structure 109 located on the western side of the complex and Structure 103 which was built in the centre of the West Group courtyard. These investigations were supervised by Bernard Hermes and they revealed that this complex is mainly of Terminal Classic date. Although the first version of the platform of the West Group was constructed during the Late Preclassic period, it achieved its final

shape and form during the Terminal Classic. At that time a new, almost quadrangular platform measuring 50 m (E-W) x 45 m (N-S) was constructed. The main access to this complex was located on its eastern facade. The majority of structures visible now on the platform were also erected in the same architectural stage. During the second construction stage the level of the West Group platform was elevated by 0.30 m by the construction of a new floor. Moreover the walls of the platform were modified (Hermes 2006b).

Excavations realized in Structure 109 showed four architectural stages for this construction, all dated to the Terminal Classic period. During the first stage, a rectangular building 9.80 m long (N-S) and 6 m wide (E-W) was constructed. It consisted of two vaulted chambers which were separated by a wall with a single doorway. Access to Structure 109 was located on its eastern facade. Both chambers of Structure 109 had benches but a bench constructed inside the western chamber had the form of a throne. During the following architectural stages, remodelling was carried out in the interior and exterior of the building (Hermes 2006b).

Structure 103 was constructed during the Terminal Classic period in the centre of the West Group courtyard (at the top of the first Terminal Classic version of the West Group platform). It was a square platform 3.50 m long on each side and 1 m high with a stairway located in the centre of its western facade. The location and form of this construction suggests that it had a ceremonial function. During the second architectural stage, Structure 103 was enlarged by 0.50 m to the north, south and east. Moreover, this construction was elevated by 0.50 m. The new version of the stairway was also constructed on the western facade of Structure 103 (Hermes 2006b). According to Bernard Hermes (2006b) the West Group was inhabited during the Terminal Classic period by important lineage of Yaxha elites.

South Acropolis

This complex consists of many palace structures arranged around six patios. It served as the main residential group for the Yaxha elites. No extensive excavations were carried out in the South Acropolis until 2005 but according to Hermes and Martínez (2005), the majority of structures of this complex were constructed during the Late Classic. They also point out that some structures seem to have been constructed during the Terminal Classic. Structure 383 is such an example. It was built at the end of the stairway which led from Vía 6 to the interior of the South Acropolis. Thus, Structure 383 closes access to the complex in the same manner as the Terminal Classic Structure 135, constructed at the entrance of the North Acropolis. This architectural pattern is, according to Hermes and Martínez (2005), typical for the Terminal Classic period at Yaxha.

In 2005, the PDS project started investigating and restoring Structure 375 and the neighbouring Patio 4 of the South Acropolis. Tentative results of this research indicate that Structure 375 underwent a rebuilding programme during the Terminal Classic which most probably included the construction of several chambers on its southern side. North of Structure 375, in the area of Patio 4 a Terminal Classic midden (Midden 5) that contained 4361 sherds including moulded-carved fragments was discovered. Investigations in the southwestern corner of the South Acropolis platform indicate that during the Terminal Classic period, an outset stairway which led at the top of this complex from the outside was constructed (Hermes 2006b) (Fig. 94).

North-East Acropolis and other parts of the site

One test pit (Subop. 37) excavated in the plaza of the North-East Acropolis, which is a huge platform topped by several buildings, contained in its second layer (fill below the paving) Terminal Classic sherds (Hermes 1996: 98, 102). Thus, the plaza of this complex must have been paved during the Terminal Classic and it is possible that during this period some of the structures visible today in the North-East Acropolis were built or rebuilt.

Traces of Terminal Classic activity were also detected in the Twin Pyramid Group at Yaxha. During the test-pitting programme carried out by the Triangulo Project in the 1990s, Terminal Classic ceramics were recovered in the upper layers of the construction fill of the plaza (Hermes and Martínez 2005). Therefore it is possible that the Twin Pyramid Group underwent at least limited remodelling (paving?) during this span of time.

Suboperation 38, located north of Structures 350 and 351 also yielded copious Terminal Classic material. In its second layer (between 0.15 and 1.90 m) many Terminal Classic sherds were found, along with a complete vessel (YXMC 023) deposited in an upturned position. The vessel was probably part of an offering. In other suboperations excavated in Yaxha (nos. 64, 65, 80, 81, 83), material recovered from the upper levels was assigned either to the Late or Terminal Classic period (Hermes 1996).

During the Terminal Classic the Blom Causeway which connects the central part of the site with the Maler Group, was elevated by 0.20 m by the construction of a new stuccoed floor. In the same period, a bench 2.75 m wide and 0.90 m high was constructed in the southern half of the western wall of the causeway (Hermes 2003b).

Recent PDS project investigations in 2005 in Structure 152 (a radial pyramid dating to the Late Preclassic) located close to Plaza C indicates that it underwent important architectural modifications during the Terminal Classic period. The northern facade of this construction continued to be used during the Terminal Classic while other facades were, in large part, dismantled and stripped of their masonry facing. Subsequently, to avoid erosion of this pyramid, in the Terminal Classic it was covered with a layer of mortar consisting of lime mixed with stones (Bernard Hermes, personal communication, 2005).

5.3. Terminal Classic burials and offerings

During the research of the PDS and Triangulo Project several Terminal Classic burials and offerings were discovered in the complexes which were investigated. Tables 9 and 10 contain description of these finds and provide their exact location and content as well as other information.

5.4. Terminal Classic ceramics

Almost all Terminal Classic slipped vessels from Yaxha belong to the Peten Gloss Ware Class. However, other ceramic classes, such as Vinaceous Tawny, Fine Orange and Fine Gray (groups: Chunhuitz, Altar, and Tres Naciones) are also represented, though with less frequency.

Table 9. A list of Terminal Classic burials found in Yaxha

No.	Location	No. of bodies	Sex	Age	Condition	Position	Furniture	Comments
1	it was found in the surface level, on the stairway of Structure 216-1a, between the second and third terrace of the pyramid platform; burial was discovered in a layer which consisted of soil and rubble	3	?	?	poor	?	none	according to Hermes, Noriega and Calderón (1997: 292), Burial 1 can be dated to either the Late or Terminal Classic period
2	burial was uncovered at a distance of approximately 2 m east of Structure 5 (Fig. 64); it was found at a very shallow depth in a layer of a construction fill of the plaza consisting of small stones and soil of gray colour	1	F	adult	good	supine, head north	stingray spine located in the area of pelvis; two ceramic whistles (one is anthropomorphic and the other represents an owl (Morales 2001: 160)	first, Paulino Morales (2001) dated this burial to the Late Classic period. However, verification of earlier research by Bernard Hermes in the Maler Group indicates that Burial 2 can in fact be dated to the Terminal Classic
3	burial was uncovered approximately 1 m east of Structure 5 and 3 m north of Burial 2 (Fig. 64) (Morales 2000); it was found 0.45 m below the surface in a layer of construction fill consisting of small stones and soil of grey colour;	1	?	infant	poor	?	one potbellied anthropomorphic figurine (Morales 2001: 160)	initially, Paulino Morales (2001) dated this burial to the Late Classic period. However, verification of earlier research by Bernard Hermes in the Maler Group indicates that Burial 3 can in fact be dated to the Terminal Classic
4	it was discovered in a circular pit beside the northern wall of Structure 7 (Fig. 63) (Morales 2001: 160)	1	?	child	poor	?	bowl with concave bottom of Chaquiste Impressed type; the bowl was placed close to the pelvis of deceased person (Bernard Hermes, personal communication, 2005)	initially, Paulino Morales (2001) dated this burial to the Late Classic period. However, verification of earlier research by Bernard Hermes in the Maler Group indicates that Burial 4 can in fact be dated to the Terminal Classic
7	at the base of the southern extreme of the eastern wall of Structure 146 platform. Burial was found below the floor of the North Acropolis plaza in a cist 1 m long, between 0.22 and 0.28 m wide and 0.40 m deep. The cist was covered by five stone slabs	1	?	?	good	flexed, left side, head south	necklace made up of shell beads (YXMM 041); bracelet consisting of 7 shell beads on right hand (YXMM 040) and another bracelet consisting of 5 shell beads on the left hand (YXMM 039)	

Table 10. A list of Terminal Classic offerings found in Yaxha

No.	Location	Content	Comments
4	it was deposited close to Structure 7 of Maler Group	eight eccentric flints of various shapes	
5	this offering is associated with Structure 5 of Maler Group and was discovered beside this construction	zoomorphic ceramic figurine (YXFC 022)	
26	interior part of Structure 146, offering was found on the floor of Structure 146 room in front of the main doorway located on the eastern wall of the building	one fragment of projectile point (YXML 102); one fragment of <i>metate</i> placed in inverted position (YXML 103) and one <i>mano</i> of quartz (YXML 104)	
30	it was found in front of the first body of the southern side (its eastern extreme) of the West Group platform	bowl with concave bottom (YXMC 048). The vessel has a small perforation (with diameter of 1.4 cm) at its bottom. The vessel is unslipped	although ceramic type of this vessel is undetermined it is dated to the Terminal Classic on the basis of its ceramic paste
31	in front of the central part of the southern wall of Structure 103	two vessels; the first vessel is globular <i>olla</i> (YXMC 49), most probably of Pantano Impressed type complete in 25%. The second ceramic is a miniature vessel (YXMC 050) with rectangular-shaped base (3.5x2 cm) 5 cm high. This vessel was deposited inside the globular <i>olla</i> . Its ceramic type is undetermined	
32	it was discovered on the last floor in front of the southern wall (western extreme) of the platform which is topped by Structure 147. The vessel was found in an ashy matrix layer	flat-based bowl of Azote Orange type (YXMC 051)	

In terms of ceramic technology, as in the earlier period, red slip dominates in monochrome vessels as a final surface (Tinaja Group). On the other hand, brown, black as well as orange slips increased during this period (Groups: Maquina, Azote, and Achote). A similar tendency is observed in Tikal during the Eznab phase, where the use of black slip became more common for some vessel types (Culbert 2003: 62). At Yaxha, we found that a greater variety of ceramic pastes were used in the manufacture of ceramic vessels in the Terminal Classic in comparison to the Late Classic period. The same tendency has been observed in other Maya regions, e.g. the Petexbatun, where, despite a profound crisis and collapse we can see a significant decrease in the standardisation of monochrome ceramic production (Foias and Bishop 1997). This, in turn indicates an increase in the number of pottery producers or greater variety of production sources.

Ceramic forms which dominate during the Terminal Classic period at Yaxha are bowls and dishes with large diameters and incurving rims. Among the new ceramic forms which appear at that time are concave-bottomed tripod plates with straight or curved incurving walls and sharp or round rims; globular jars; tetrapod dishes with notched basal flanges and straight diverging walls; barrel-shaped vessels with a tall ring base and straight converging walls and decoration imitating representations from imported Fine Orange vessels. Another typical form that occurs during this period is represented by unslipped incense burners with solid or hollow handles (Hermes and Martínez 2005).

During the Terminal Classic, the orange colour of polychrome vessels decreases in favour of cream colour that was used very widely. Polychrome vessels are mainly represented by Zacatel Cream-polychrome type. The most popular forms of polychrome vessels are tetrapod dishes and dishes without any support as well as cylindrical vases.

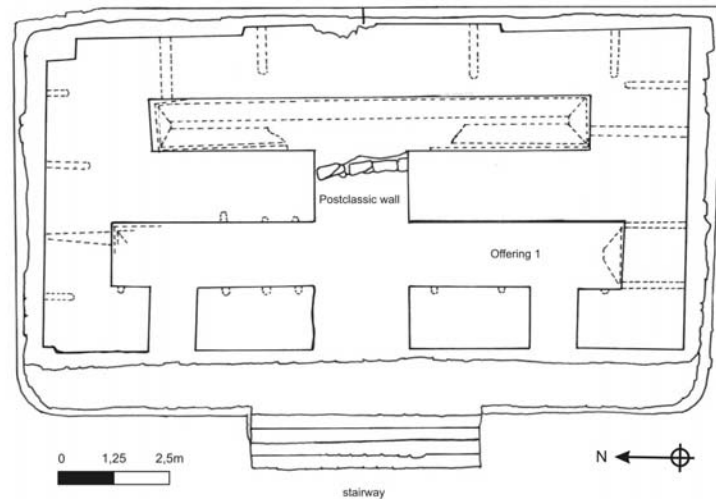
The most abundant ceramic type in Terminal Classic Yaxha is represented by unslipped vessels which belong to the Uaxactun Unslipped Ceramic Class. The most frequent form among this ceramic class is represented (as in earlier periods) by *ollas* or jars with characteristic thumb-impressed decoration on the rims or the lips of vessels, known as the “pie-crust” decorative mode that is typical of the period.

A significant number of ceramics of the Fine Orange class represented by the Altar Group were also found in Yaxha (e.g. Fig. 104). The main form of this group is represented by barrel-shaped vessels with a tall ring base. It has often been held that local imitations of the Altar Group ceramics are found at Yaxha. Prudence Rice (1986: 271) described them as “imitations” of Pabellon Modeled-carved pottery. Rice also pointed out that in terms of paste, 4 different imitations of the Pabellon type can be distinguished. However, in terms of ceramic paste and slip, these imitations belong to the Tinaja and Azote Groups (Bernard Hermes, personal communication, 2004). Only the shapes, forms and decorations on the vessels are similar. Christophe Helmke who conducted preliminary examinations of some of the moulded-carved ceramics from Yaxha, found that (in keeping with his study of the Nakum specimens) these so-called “imitations” can be aptly classified instead as representatives of two other types: namely Sahcaba and Ahk’utu’ Moulded-carved (Figs 102 and 103) (Helmke 2005, 2006) (see: Terminal Classic ceramics at Nakum).

6. Postclassic occupation

Evidence of Postclassic activity at Yaxha was discovered in a temple located at the top of Structure 216 in the East Acropolis, in 3 chultuns and in a few other spots in the central part of the site.

The archaeological context of all Postclassic finds that were discovered in Structure 216 indicates that this building was already in ruin at the time of their deposition. During the Postclassic period, in the temple of Structure 216 a small wall was constructed on a layer of debris and soil, 0.30 m above the level of the floor in the area of the doorway interconnecting the frontal and rear chambers. Inside the rear chamber, a large concentration of fragmented ceramic material and copal was found (Problematic Deposit 1). In the frontal chamber, an offering was colocated (Offering 1) at the level of the soffit (Fig. 68).



68. Yaxha. Plan of Structure 216's temple with location of Postclassic finds (redrawn by K. Radnicka after Hermes, Noriega and Calderón 1997: fig. 21)

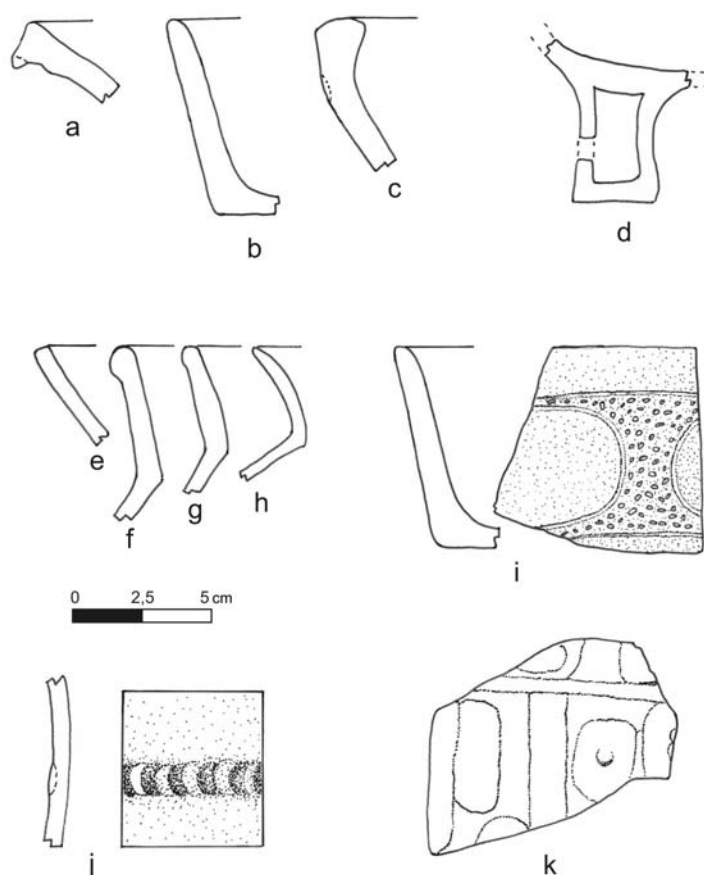
It consisted of three ceramic vessels (two bowls and one jar of probable Day Light Orange type). The vessels contained more than one thousand pieces of greenstone (worked artefacts as well as chips mainly from turquoise as well as from jadeite and nephrite), 51 worked pieces of shells and conches, 110 unworked shells and conches, two flint flakes, debitage, one fragment of pyrite, one gold disc and one sheet made of unidentified material (Hermes, Noriega and Calderón 1997: 283–284).

Other Postclassic materials were also discovered in three chultuns. One of them (Chultun 12) is located 60 m to the east of the East Acropolis. Excavations in that chultun resulted in the discovery of a complete concave lid of the Topoxte Red type.

In another chultun (no. 14) located 15 m southeast of the southeastern corner of the East Acropolis, 25 sherds of Isla complex and 3 dating to the Late Classic were found. It is possible that the chultun served as a storage place; it was constructed during the Late Classic and later used in Postclassic times.

Chultun 17 also yielded Postclassic material and it was discovered 600 m southeast of the East Acropolis. The chultun contained 56 Postclassic sherds, 3 cores, one nodule, 3 flakes and a stone axe as well as malacological vestiges that belonged to *Ampularia Flagellata*, *Pachychilus Larguillerti* and *Pachychilus Glophirus*. It is possible that the chultun was made and used during the Postclassic (Hermes and Noriega 1998: 756).

Other very scarce Postclassic materials were found on a stairway located in the centre of the western side of the Blom Causeway, at the southern extreme of Lake Causeway (Fig. 69e-h,j), and in the area of the present archaeological camp (close to the lake). A few Postclassic sherds were also discovered on Platform 6. It must be noted that these materials were all found in a questionable archaeological context.



69. Yaxha. Terminal Classic and Postclassic ceramics from area of Lake Causeway; a–d) Terminal Classic fragments, Peten Gloss wares; e–h) Postclassic fragments, Pozo Unslipped type; i, k) Terminal Classic decorations; j) Postclassic decoration (redrawn by K. Radnicka after Hermes, Morales and Möllers 1999: fig. 26)

7. Conclusions

All of the archaeological data indicate that during the Terminal Classic period Yaxha was still a very important site and underwent a significant building programme. In order to realize these civic-ceremonial architectural programmes, the Yaxha elites must have retained strong political-economical power and sufficient control over the local population. Terminal Classic occupation was documented in all the investigated complexes. Vestiges from this period indicate that stable and undisturbed occupation continued well into the Terminal Classic period. It seems that during the Terminal Classic, the North Acropolis with its few palace structures served as the main residence group for the local elites. Another important elite residence complex during this period was the South Acropolis. Recent investigations carried out in this group indicate that during the

Terminal Classic period, it underwent important rebuilding programmes and continued to be inhabited by the Yaxha elite. On the other hand, relocation of the few stelae as well as the remodelling of existing temples and pyramids seen in the area of the Maler Group (and to a lesser extent in the East Acropolis), indicates that religious activity focused mainly in these sectors. To provide good communication between the Maler Group and the central part of the site, the Blom Causeway also underwent remodelling and was paved. Recent investigations in the West Group, which is located close to the southern end of the Blom Causeway, indicate that this complex was almost entirely constructed during the Terminal Classic period and was inhabited by a local elite lineage. The other parts of Yaxha were not thoroughly investigated but many test pit excavations yielded Terminal Classic materials, suggesting additional architectural activity.

All recovered data indicate that architectural techniques did not change in the Terminal Classic in comparison to the Late Classic period. Walls in buildings from the Terminal Classic were constructed with large well-worked stones covered with stucco. Other popular techniques involved the construction of inner and outer face walls from large well-worked stones. The space between these walls was filled with construction material which consisted of stones, soil, clay and mortar. However, new architectural elements or modes appeared at that time. These are: 1) use of columns in the facade of the building (Structure 90); 2) construction of buildings (superstructures of Structures 1 and 128) and other architectural elements (columns) from small, well-worked stones; 3) appearance of inset panels in platform facades (Structures 134 and 145–147). At least some of these innovations in the architecture (columns; using of small, well-worked stones in the construction) may indicate influences from other Maya regions (Northern Yucatan and Southeastern Peten).

Postclassic material from Yaxha is very scarce and indicates that as in the case of Nakum, despite the cultural development during the Terminal Classic, the site must have been almost completely abandoned by the end of that period. Unique ceramic finds which come from the Early Postclassic period are represented by Offering 1 (New Town ceramic sphere), which was co-located at the time when the temple of Structure 216 had been already in ruin. It should be stressed that all the components of Offering 1 come from outside the Southern Maya Lowlands. The ceramics of Offering 1 represent two variants of the Daylight Orange type that are usually not found in this area. According to Hermes (2000a: 281), the first Postclassic people who settled in the area of Lake Yaxha were those who produced vessels of Pasta Clemencia Cream. These ceramics have a local origin and are mainly found on Macanche Island within Early Postclassic contexts (P. Rice 1987). Hermes (2000a: 281) argues that people who used these ceramics were also responsible for depositing Offering 1 and that they came to the area of Lake Yaxha at approximately AD 1150–1200. Thus, in Yaxha we observe the same situation as in Nakum where the first Postclassic occupants came some time after the city was abandoned by the original Classic occupants.

MINOR SITES

El Carmen

The site of El Carmen is located on an elevated area 305 m above sea level, approximately 1.6 km east of Paso del Carmen. The site was discovered in 1999 by Sergio Maldonado and Walfre Chi. In the same year it was cursorily investigated by Rosa María Chan (Chan 1999b) who collected ceramics from the looters' trenches and opened a few test-pits. Quintana and Wurster (2001) provided a schematical plan of the site. In 2000, the site was investigated by Vilma Fialko as part of the Regional Archaeology Programme (Fialko 2000b, 2001). In her report, Fialko provided a new, exact map of the southern part of the site (only this part of the site was known at that time) along with a detailed description of all the architectural groups and other structures at the site. She also excavated a few test pits in El Carmen. In 2004 the site was surveyed again. New structures were discovered and the map was updated. The work was supervised by Paulino Morales. Moreover, in 2004 many looters' trenches were documented, test pits were excavated and two chultuns were investigated (Fialko and Ramírez 2004).

El Carmen is made up of 104 structures which form the Principal Group, North Group and 11 small dispersed complexes. There are more structures located to the east and south-east of El Carmen on small elevations. The Principal Group is formed by a vast plaza (4119 m²) surrounded by 8 structures including one palace almost 43 m long, having at least 2 floors (Fialko 2001). From the south and west, the plaza is bordered by 3 patio groups (in her 2000 report, Fialko called them Groups B, C and D). The Principal Group is connected by a causeway approximately 202 m long and between 16.3 and 18.7 m wide with a single structure (Structure 24 forming Group E). An aguada extends to the east of Structure 24. Further to the east, three other architectural compounds (denominated Groups F, G and H by Fialko [Fialko 2000b]) are located. The North Group of El Carmen is situated approximately 800 m north of the central plaza of the Principal Group. It is formed by the North and South Acropolises, the principal plaza, two additional plazas and three patios (Fialko and Ramírez 2004). Three quarries were discovered at the site and they are located close to Structure 25 of Group F. There were also 9 chultuns and 2 caves documented at El Carmen (Fialko 2000b, Fialko and Ramírez 2004).

Investigations carried out at the site by Vilma Fialko and Paulino Morales indicate that El Carmen saw its greatest development during the Terminal Classic period (Fialko and Ramírez 2004). Terminal Classic material strongly prevailed in all excavated test pits. It was recovered in all the layers of test pits excavated in the following structures or areas: Plaza B, Southern Palace of Plaza A, northern sector of Plaza A, South Group (centre of the plaza), South Group (Structure 1), Structure 2 of Group 3, Calzada Structure, West Group (Structures 2 and 3), Chultuns Group (in the centre of the plaza), Cave Group, South Plaza, Plaza A (Structure 2 – test pit excavated in a looters' trench), test pit excavated at the beginning of the causeway and another one excavated in the *aguada*. In a test pit excavated in the West Acropolis the first layer yielded Tzakol materials while the second layer had Tepeu 3 ceramics. Another test pit excavated in Structure 3 of the West Group yielded Tepeu 2 and Tepeu 3 materials. It should be also mentioned that in the area of Structure 3 of Patio I, a midden containing 5201 sherds was discov-

ered. The midden contained Late Preclassic, Early Classic as well as numerous Terminal Classic sherds.

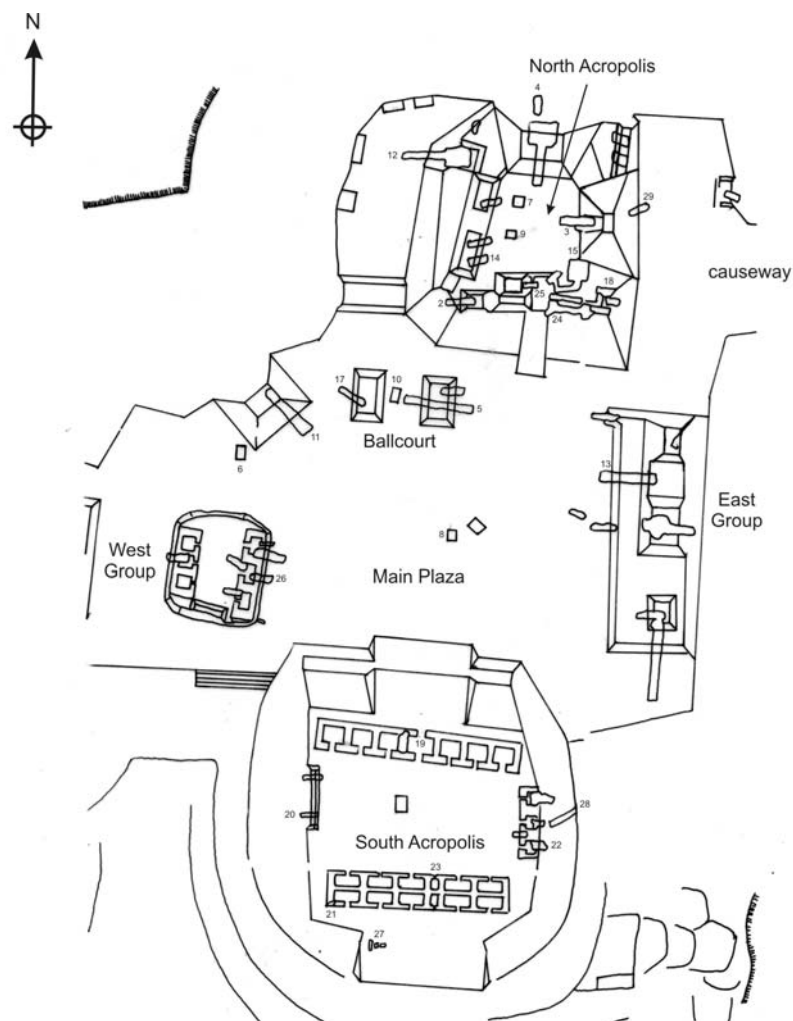
In addition, almost all the ceramics recovered from the rubble of looters' trenches and the rubble of collapsed rooms also date from the Terminal Classic. Material from this period was found in looters' trenches and rubble in the following structures and complexes: South Palace (Plaza A), North Structure of the South Acropolis, Structure 3 of Plaza A, Structure 1A of Plaza A, Chultuns Group, Structures 3 and 4 of South Group, Structure 2 of Group 3, Structures 1 and 3 of Patio 3, Structure 4 of Group E, Calzada Structure, Structure 2 of South Group, Structure 3 of Patio 1, Structures 1, 2, 3 and 5 of West Group. In addition, Terminal Classic materials were recovered from Chultun 1 and a cave. One burial discovered in a cist in Structure 3 of the West Group is also of Terminal Classic date (Fialko and Ramírez 2004).

Naranjito

Naranjito is located approximately 10 km southwest of Nakum on a natural elevation of terrain surrounded by *bajos*. It was first inspected in 1994 by Marco Tulio Marroquín, a staff member of the Triangulo Project. The following year, it was visited several times by other members of the Triangulo Project. The first plan of the site was published in 1996 by Oscar Quintana (Quintana 1996). The site was surveyed and tentatively researched by Vilma Fialko during the second phase of the Regional Archaeology Programme. Important archaeological investigations were undertaken in 1999 by Rosa María Chan (1999a) and involved the clearing and documentation of looters' trenches as well as a test-pitting programme. In sum, 28 excavation units (suboperations) were made, of which 21 constitute investigations in looters' trenches and the remaining 7 were small test pit excavations. The pre-Hispanic occupation of the site was reconstructed on the basis of archaeological data obtained from looters' trenches and test pit excavations only. In 2003, 95% of all looters' trenches at Naranjito were sealed as a result of the Salvage Programme of the Triangulo Project (Matute and Noriega 2005: 137–138).

Naranjito consists of 46 structures grouped around 15 plazas covering an area of 200 m (N-S) x 310 m (E-W). The heart of the site constitutes a large plaza delimited from the north and the south by two extensive architectural complexes called the North and South Acropolises and from east and west by the East and West Groups (Fig. 70). In the northwestern part of the plaza, a ballcourt and a pyramid-like structure are located. A sacbe 100 m long connects the above mentioned complexes with a small platform located to the east. This epicentral part of the site is surrounded by peripheral structures which constitute complexes designated by Rosa María Chan (1999a) as Plazas F-O. They are located on terrain that is lower than that of the epicentral structures which were built on an elevated area. In the northern and eastern periphery of the site, 10 quarries and 3 chultuns were discovered.

The earliest traces of occupation at Naranjito are represented by ceramics from the Late Preclassic period and were discovered in the fill of some of the looters' trenches. Of the materials collected at the site 8% represent Early Classic occupation. Also, according to Rosa María Chan (1999a), the first versions of some of the buildings located in the area of the North Acropolis, South Acropolis and East Group may have been constructed during this period. Most material (63%) collected from looters' trenches and excavated



70. Map of Naranjito showing looters' trenches and excavated units (suboperations) (redrawn by K. Radnicka after Chan 1999a: fig. 7, Proyecto Triángulo, IDAEH)

from test pits during Chan's investigations comes from the Late Classic period and it seems that this era saw the greatest development of the site. The main buildings of the North Acropolis, the palace-like structures of the South Acropolis, the ballcourt and probably all the structures now seen in the area of the East and West Groups can all be dated to this period. Archaeological material from the ensuing Terminal Classic period was discovered mainly in the surface and humus layer in the central part of the site. There are also traces of architectural activity that can be dated to the same period.

Numerous Terminal Classic materials were detected in many looters' trenches and test pits excavations at the site. It must be stressed that the sherds that come from looters' trenches do not represent a clear and undisturbed archaeological context and thus they cannot provide us with precise information about the architectural stages or the dating of the structure where they were found. However, there exists some data indicating that Naranjito was still developing during the Terminal Classic and that the site might have been rebuilt at this time.

In the area of the North Acropolis, numerous Terminal Classic materials were detected in one looters' trench (Suboperation 28), located in the eastern side of the platform of this architectural complex (Fig. 70) (Chan 1999a: 52). It is possible that this material is related with some kind of remodelling that took place during the Terminal Classic period. However, this supposition can be verified only by more extensive excavations.

Three test pits were opened in the area of the Main Plaza. Two of them (Suboperations 6 and 10) yielded Terminal Classic material in the uppermost humus layer (Chan 1999a: 34, 35, 39).

In the area of the South Acropolis, only one test pit was opened (Suboperation 16) in the centre of its plaza which is surrounded by palace-like structures. In the uppermost level (humus) of this suboperation, Terminal Classic sherds were discovered. Some Terminal Classic sherds were also found in the fill of a looters' trench made in the eastern part of the platform of the South Acropolis (Suboperation 28) (Chan 1999a: 21) but none of them can be definitively attributed to the several construction stages recorded on the profile of this trench. It must also be stressed that huge amounts of sherds from the Terminal Classic period were discovered in the southern part of the South Acropolis (Suboperation 27). They were located on the stairway and *talud* wall of this architectural complex. According to Rosa María Chan (1999a: 21), all of the material discovered in the test pit opened in the plaza of the South Acropolis as well as in the fill of looters' trench dug in the platform of that complex indicate that the first version of the South Acropolis was built during the Late Preclassic period; it was rebuilt in the Early and Late Classic and the last remodelling can be probably dated to the Terminal Classic period.

Among Terminal Classic ceramics (578 fragments) found during investigations carried out by Chan in Naranjito, the largest fraction is eroded fragments of undetermined type (64.35%). The second biggest group is represented by Tinaja Red (19%). Other ceramics belong to Maquina Brown (6.74%), Cambio Unslipped (3.46%), Achote Black and Carmelita Incised (1.38% each). Less frequent groups are represented by Gallinero Grooved (1.21%), Camaron Incised (0.86%), Pantano Impressed (0.34%), Rosa Punctated, Tenaja Grooved, Juina Bichrome *rojo sobre ante*, Palmar Polychrome, Chaquiste Impressed, *Variante Chaquiste sobre filete*, Encanto Striated (0.17% each) (Chan 1999a: 54).

In sum, the ceramics from the Terminal Classic period constitute 19% of all the material recovered from the site during Chan investigations. Although this number is relatively high in comparison to the archaeological material from other periods detected at the site, from a statistical point of view, we can see a significant decline in the number of ceramics – a fact that is surely related with the decline of the population and construction activity at the site. On the other hand, there exists at least one trace of architectural activity during the Terminal Classic period in the area of the South Acropolis. The site must

have been slowly abandoned during the Terminal Classic period since vestiges from the Postclassic are not present.

El Tigre

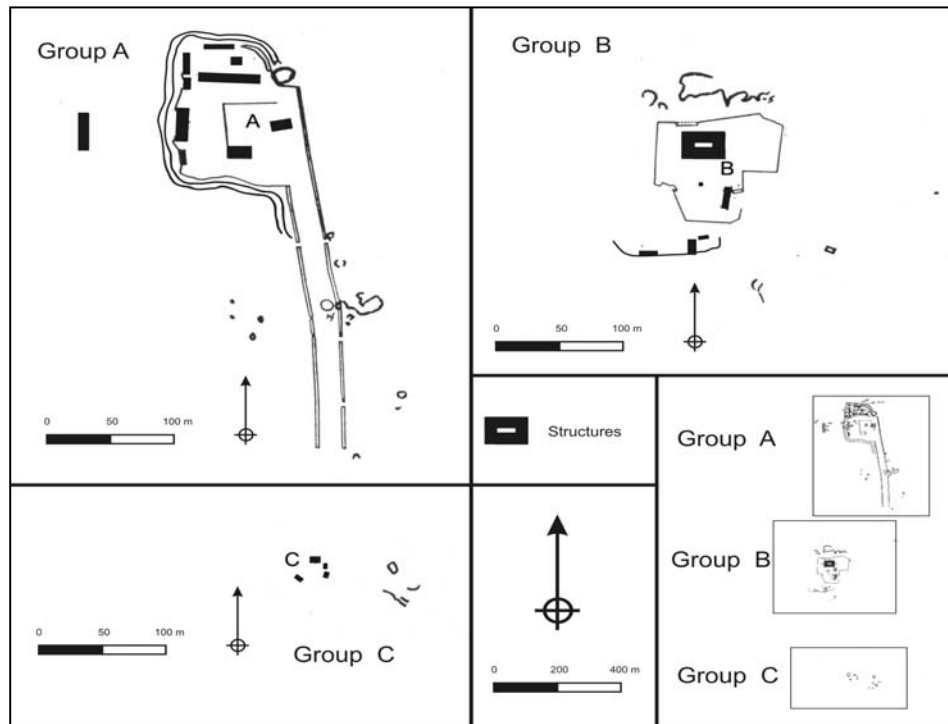
The site of El Tigre is located 4.5 km north of Nakum on an elevation in a mountainous area. It was discovered in 1989. In 1995, El Tigre was visited by Oscar Quintana who prepared the first schematic plan of the site (Quintana 1996). The first important investigation of El Tigre was undertaken by Rosa María Chan in 1999 and they focused on the documentation of 39 looters' trenches as well as on the excavation of 3 test pits. Moreover, a new and updated plan of the site was prepared. Our present knowledge concerning the pre-hispanic occupation of El Tigre is mainly based on the results of the 1999 research project (Chan 1999b).

El Tigre consists of 24 structures that compose 3 architectural complexes, designated Groups A, B and C (Fig. 71). Group A – the northernmost complex consists of 12 structures located around small plazas. The causeway (18 m wide and 235 m long) stretches from Group A to the south in the direction of Group B but it does not connect both complexes. The largest and the most important structure of Group B and, indeed of the entire site, is a huge pyramid approximately 20 m high that was constructed on a small hill. Group C is located in the southern, peripheral part of the site and it consists of 4 structures. In the area of the site, 13 chultuns were discovered (only one of them was excavated) and on its outskirts, 15 quarries as well as a small *aguada* that provided the inhabitants with water were documented.

The earliest and the only evidence of the Late Preclassic occupation was found in the area of Structure 10 of Group A. Very little material from the following Early Classic period was detected in the fill of a few looters' trenches in the area of Groups A and B. The majority of structures seen today were built during the period of greatest development of the site, which seems to coincide with the Late and especially Terminal Classic period. Materials from the latter period constitute the largest portion of all of the ceramics recovered from the site. It should be stressed that the site of El Tigre was built immediately above bedrock, suggesting construction pressure (Chan 1999b: 18).

Numerous Terminal Classic materials were discovered in all 3 test pits and in the majority of looters' trenches excavated and documented at the site. Two test pits, one opened in the central part of the Group A (Suboperation 29) and the other in the middle of the plaza of Group B (Suboperation 35 – Fig. 71) led to identifying one layer of humus located immediately over the bedrock. In both cases, the layer of humus contained Tepeu 2-3 ceramics (Chan 1999b: 11, 13, 30, 36). The third test pit (Suboperation 30) was also excavated in Group A and it yielded a humus (Lot 1) full of Terminal Classic material as well as a mixture of small stones and soil (Lot 2), which is probably the part of a floor set up on the bedrock. Unfortunately, Lot 2 did not contain any archaeological materials (Chan 1999b: 11).

Almost all the structures from El Tigre were tunnelled by looters. Of special interest are structures that contained, in the fill of their looters' trenches, material exclusively from the Terminal Classic without any other, earlier sherds. These are Structures 19 (Suboperation 10), 3 (Suboperation 24), 5 (Suboperations 34 and 28), and 10 (Suboperations 38 and 39) all probably constructed during the Terminal Classic. Another group is represented by



71. Plan of El Tigre (by A. Danecki, based on Chan 1999b: figs 3–4, Proyecto Triángulo, IDAEH)

structures that provided us with a significant number of Terminal Classic materials which were mixed with the Late Classic sherds. These are Structures 18 (Suboperations 11, 12 and 13), 7 (Suboperations 16 and 17), 4 (Suboperations 19 and 20), 11 (Suboperations 40–42) and 15 (Suboperation 9). It is possible that at least some of these structures might have been rebuilt or remodelled in the Terminal Classic period; however this assumption needs to be verified during future excavations.

One excavated chultun located in the northern part of Group A yielded Terminal Classic material (Chan 1999b: 12–13) from all its layers making it almost certain that it was constructed during this span of time. It should also be mentioned that the chultun has a bell-like section. This shape is especially typical of the chultuns from the Terminal Classic period that were documented in Nakum and which were probably used to prepare lime. The chultun was made beside Structure no. 2. The fill of the looters' trench (Suboperation 32) that was made in this structure had some Terminal Classic sherds. It is possible that this structure or at least one of its architectural stages is contemporaneous with the construction of the chultun and can be dated to the Terminal Classic.

Among Terminal Classic ceramics (2579 fragments) found during investigations carried out in El Tigre, the largest amount constitute eroded fragments of undetermined type (47.30%). The second largest group is represented by Tinaja Red (25.55%). Other ceramics belong to the Encanto Striated (12.67%), Maquina Brown (5.15%) and Palmar

Polychrome (3.64%) groups. Less frequent groups are represented by Cambio Unslipped (1.66%), Infierno Black (1.35%), Chaquiste Impressed (0.69%), Zacatel Polychrome (0.5%), Batcab Polychrome (0.23%), Camaron Incised (0.19%), Infierno Black Punctated Incised, Pantano Impressed, eroded fragments of red paste (0.15% each), San Julio Modeled, Palmar Polychrome Grooved (0.07%). Gallinero Grooved, Rosa Punctated, Carmelita Incised, Tenaja Grooved, Canoa Incised, Leona Bichrome, Polychromed-on-Gray, Pedregal Modeled are represented by 1 sherd each (Chan 1999b: 40).

In sum, the Terminal Classic ceramics recovered during Chan's investigations from looters' trenches and from test pit excavations constitute 72% of all of the ceramic material that was discovered at the site. This number is extremely high and thus it is probable that the Terminal Classic was the period of maximum development of the site during which at least several buildings were constructed or rebuilt.

Other minor sites

In the Triangulo Park area, among other secondary sites, El Bajón, El Bayal, Cara Fea, Los Xateros, La Pochitoca, Poza Maya, Tintalito and Laberinto should be also mentioned.

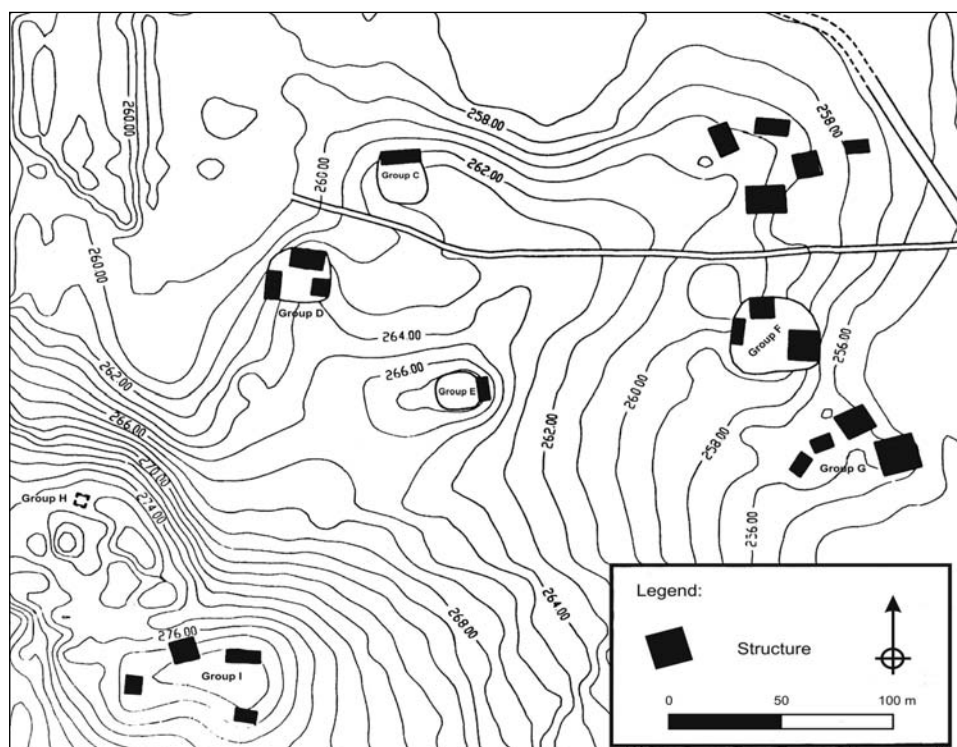
El Bajón is situated approximately 3 km north of Lake Champoxte on a small hill. The site consists of 14 structures which are arranged in 5 architectural complexes denominated A, B, C, D and E. El Bajón was investigated by Vilma Fialko under the aegis of the Regional Archaeology Programme (Fialko 1997a). The Fialko investigations indicate that the site was first settled during the Middle Preclassic period and it saw the biggest development during the Late Classic period when most, if not all structures visible today were built or successively rebuilt. Terminal Classic vestiges were found in a looters' trench made in the western side of Structure B-I located in Group B. On the profile of the looters' trench, it was possible to distinguish two walls of the western facade related to the last two construction stages of the building. One wall (related with the last construction stage) consisted of 2 rows of cut stones and another one (related with the penultimate construction stage) was formed by 3 rows of cut stones which had larger dimensions. According to Fialko (1997a), these two facade walls can be dated to the two architectural stages of the Tepeu 2 (penultimate stage) and Tepeu 3 (the latest stage) phases. In the same looters' trench a Postclassic offering was also discovered. This offering consisted of a few fragments of the Late Postclassic incensario which was embedded into the construction fill with earlier Preclassic materials (Fialko 1997a).

The site of Cara Fea is located on an elevated terrain in the area of Bajo La Justa approximately 3 km west of Poza Maya. It consists of 24 structures arranged in 8 patio groups (Groups A-H) (Fig. 72). Seven chultuns were also discovered at the site. Cara Fea was discovered in 1995 and it was first investigated by Vilma Fialko in 1996 under the aegis of the Regional Archaeology Programme of the Triangulo Project (Fialko 1997b, 1999). The investigation consisted of 64 shovel tests, 5 test pit excavations, excavation of 3 chultuns and the documentation of looters' trenches in 3 structures. Investigations realized at Cara Fea indicate that the Late Classic was the period of the greatest development of the site; 87% of all the archaeological material recovered from the site comes from this span of time and it seems that the construction of the majority of structures visible today at Cara Fea took place during the Late Classic (Fialko 1999). Terminal

Classic material recovered from the site is very scarce. Sherds assigned to Tepeu 2–3 and Tepeu 3 phases were discovered in the area of Groups A, C, D and between Groups F and G. In Group A, two Eznab or possible Eznab sherds mixed with earlier materials were recovered from a looters' trench made in Structure A-1 (Subop. 5B-3). Other Terminal Classic sherds were discovered at the following areas: in one shovel test located north of Structure A-2 (Suboperation 5C-1); another located west from Structure A-3 (Suboperation 5C-10); in Chultun 4 where it was mixed with earlier materials (Suboperation 5T-4) and finally in one test pit excavated in the north-eastern corner of Structure A-3 (Suboperation 5G) where in the lower layer, there was a ceramic piece that could be dated to the end of the Tepeu 2 or to the Tepeu 3 phase (Fialko 1999). In Group C, Terminal Classic sherds were found in two shovel tests opened in front of Structure C-1 (Suboperations 5E-6 and 5E-5). In Group D various Terminal Classic materials were recovered from a looters' trench made in Structure D-1 as well as from several shovel tests located close to Structures D-1 and D-2 (Suboperations 5D-5, 5D-10, 5D-15, 5D-16). Finally, a few Terminal Classic sherds came up in two shovel tests opened between Groups F and G (Suboperations 5K-2 and 5K-3).

In sum, investigations carried out in Cara Fea found only 96 (1.3%) Terminal Classic sherds from among a total of 7240 recovered from the entire site (Fialko 1999). Most of them were found in small (0.5–0.7 m in diameter) shovel tests. Their amount and archaeological context indicate that the site of Cara Fea was almost completely abandoned by the Terminal Classic. Materials from the Terminal Classic were probably left by squatters or some small population that remained at that site after it was largely abandoned. Only two fragments of Postclassic ceramics were found in Cara Fea. One of them – a big fragment of a tripod plate was found in a shovel test opened close to the south-eastern side of Structure B-2, Group B (Operation 5N-3). Another Postclassic ceramic piece was recovered from a shovel test in Group F (Suboperation 5H) (Fialko 1999).

Other traces of Terminal Classic occupation were discovered at La Pochitoca which is located on a small elevated area in the eastern limit of Bajo La Justa and approximately 2 km east of Poza Maya. La Pochitoca consists of 34 structures that form 8 architectural groups (A-H) located around relatively small plazas. In the eastern part of the site, there is a small causeway that leads to a small *aguada*. Among all the structures documented at La Pochitoca, the structures that stand out are a ballcourt (Structures 4–5) and the E-Group Complex consisting of Structure 5 and a long platform located to the west of it. The site was first visited by Ian Graham who took a picture of one inscribed stela located in the centre of La Pochitoca. No further work was done until the site was investigated by Vilma Fialko and her team under the Regional Archaeology Programme (Fialko 1999). During two short archaeological seasons, in 1997 and in 1998, the first map of the site was created and small-scale excavations were carried out. The excavations consisted of opening 13 test pits and documenting all the looters' trenches. The Fialko investigations indicate that La Pochitoca was first settled during the Middle Preclassic and it underwent enlargement during the following Late Preclassic and Early Classic periods. However, the Late Classic saw the greatest development of La Pochitoca. Nearly 80% of all the material recovered from the site can be dated to this period and it seems that the site achieved its final shape and form during this period (Fialko 1999). Archaeological material from the Terminal Classic is very scarce and it does not even



72. Map of Cara Fea (after Kunen et al. 2000: fig. 4 modified by A. Danecki)

constitute 1% of all the ceramics recovered at this site. Terminal Classic sherds were collected from the surface in the peripheral areas of the site: close to Structure 28; in the vicinity of the quarries; at the end of a causeway and in the southern-most complex of the site (Group H). It is possible that during the Terminal Classic, Stela 1 was moved from its original position and set up in front of Structure 1. Although no traces of architectural activity dating to the Terminal Classic were detected, Fialko (1999) argues that Plazas A, B and Group H which are all located at the western (Plazas A, B) and southern (Group H) limits of the site seem to be added to the city plan at a late date, probably during the Terminal Classic. However, none of these complexes were investigated and this hypothesis remains just that.

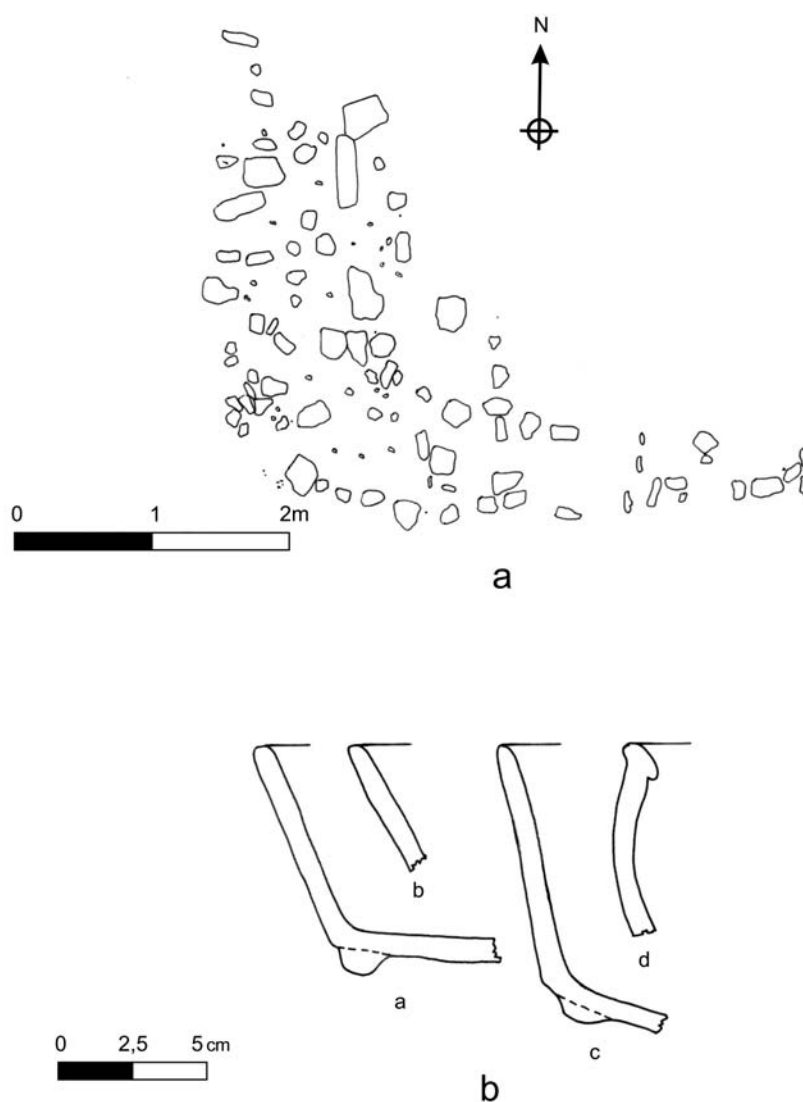
Another important site of the Triangulo Park area, Poza Maya, is located approximately 5 km north of Yaxha and 7 km south of Nakum (Grazioso Sierra et al. 2001: 206), in the central-eastern part of Bajo La Justa. The site was first explored in the 1970s by the Instituto de Antropología e Historia de Guatemala under the direction of Miguel Orrego (1978). Orrego made a reconnaissance of the site and created the first map. In 1994 Claudia Molina prepared another map of the site as part of her Bachelor's thesis on its architecture (Molina 1994). Initial archaeological investigations in Poza Maya were carried out as part of the Major Sites Archaeology Programme (Triangulo Project) in 1992. The site was surveyed, ceramics were collected from the surface and a few test pits

were excavated. All archaeological work done at the site was supervised by Francisco López. In 1995, salvage investigations were carried out in several deteriorated structures (Structures 1, 14, 20 and 21); limited excavations were also carried out at the site (in Structures 1 and 5) under the supervision of Juan Luis Velásquez and Zoila Calderón. The salvage work and excavations were subsequently continued in 1998 in Structures 1 and 21 by Bernard Hermes and Vinicio García (Hermes and Contreras 2002). In 1999, Poza Maya and its surroundings were also investigated by Vilma Fialko under the Regional Archaeology Programme. It should be also mentioned that in 1995 and 1996, the Bajo Communities Project conducted investigations in the area of Bajo La Justa and its vicinities (Kunen et al. 2000). These investigations resulted in the discovery of several peripheral patio groups around Poza Maya.

Poza Maya consists of 10 architectural groups. The northern part of the site is occupied by a large plaza surrounded by platforms and pyramid-like structures. This complex, called Group A, is connected by a more than 100 m long causeway with Groups B and C. Groups D–F border the core of the site while the peripheral Groups G–J are located on a few small hills to the east. A huge artificial *aguada* was constructed 1 km southwest of the city centre. The Triangulo Project research indicates that the site was first occupied during the Middle Preclassic period. However, the greatest development of the site took place during the Early Classic period when most of the structures investigated were built. Construction activity continued during the Late Classic. Vestiges from the Terminal Classic are very scant and it seems that the site was almost completely abandoned at the end of the Late Classic. Traces of Terminal Classic occupation were localized only in the south-eastern and south-western parts of Poza Maya. At the foot of the Group D platform, material of Tepeu 2-3 date (sherds of Tinaja Red type) associated with Structures 51 and 52 (a.k.a. Structures D-1 and D-2) was found. Although these structures were not fully excavated, according to Fialko (1999) a few sherds of the Tinaja Red type recovered from this area indicate that the last architectural stage of both structures may be dated to the Terminal Classic period. Some minute traces of Tepeu 3 phase occupation were also detected in the area of Group E as well as in Group F where Terminal Classic sherds were found close to this complex platform (Fialko 1999). Structure 54 (a.k.a. Structure F-2) is located on the eastern side of Group F. It was tunnelled and partly destroyed by looters. All the material recovered from the looters' trench comes from the Early Classic period. However, on the surface of this structure, a small platform which probably had some domestic function was found (Fialko 1999). The platform was made of stones and it has an irregular plan (Fig. 73a). According to Fialko (1999), this structure was built during the Terminal Classic period.

In 1995 and 1996, work was done under the Bajo Communities Project in the area of Bajo La Justa (Kunen et al. 2000). During this research several groups of buildings were discovered east of Poza Maya and were called, "Island 6". "Island 6" is considered to be a part of the peripheral settlement around Poza Maya. One group of "Island 6" (called Group P) resulted in the discovery of Terminal Classic materials. Structure 3 of that group had Terminal Classic occupation along with Early and Late Classic ceramics (Kunen et al. 2000: 25).

In sum, during investigations carried out as part of the Salvage Programme in Poza Maya only 4 sherds of Terminal Classic date were found (Fig. 73b). All of them belong



73. Poza Maya, a) plan of stone platform discovered at the summit of Structure F-2 (redrawn by K. Radnicka after Fialko 1999, Proyecto Triángulo, IDAEH); b) Terminal Classic ceramics found in Poza Maya (redrawn by K. Radnicka after Hermes and Contreras 2002: fig. 27)

to the Tinaja Red type and they are represented by two main forms, bowls and dishes. Among surviving fragments, a few characteristic features of this ceramic such as round mouth, straight and incurving rims are notable. The vessel bottoms are plain or concave and solid conical supports are also found in one ceramic piece. Decoration on one Terminal Classic piece included an incision (Hermes and Contreras 2002: 280).

Vilma Fialko's investigations carried out under the aegis of the Regional Archaeology Programme at Poza Maya yielded more Terminal Classic sherds (46 fragments of Tepeu 3 phase). They are characterised by ceramic paste tempered with sand and mica and represented mainly by bowls and *ollas* of Tinaja Red and Chaquiste Impressed types. The presence of mica in the ceramic paste is a characteristic feature for the sites located in the mountainous area close to Bajos Santa Fe and La Justa (Fialko 1999). As far as the Postclassic occupation at Poza Maya is concerned only one piece (a part of an incense burner of the La Justa type) from this period was discovered at the site (Fialko 1999).

The site of Tintalito, located at the western limit of Bajo La Justa, also showed limited evidence of Terminal Classic occupation. This site consists of thirteen structures arranged around three plazas, denominated as Groups A, B and C. Tintalito was investigated in the 1990s by Vilma Fialko as part of the Regional Archaeology Programme. Data from this short research project indicates that the site was first occupied during the Middle Preclassic period and saw its apogee during the Late Classic when the majority of the structures visible today were most probably constructed. As far as the Terminal Classic occupation is concerned, only one test pit (Suboperation 104) opened in front of Structure A-III (Group A) during Fialko's investigations had Tepeu 2-3 material in its uppermost layer (Lot 1, Fialko 1997b). No traces of Postclassic occupation was discovered at the site (Fialko 1999a).

Laberinto is another suburban site in the Triangulo Park. It is located approximately 5 km west of Nakum. The site consists of sixteen structures and includes vaulted palaces. Laberinto was surveyed and investigated by Vilma Fialko first in 1995 and subsequently in 2000 under the Regional Archaeology Programme. Investigations included mapping the site as well as test pitting and documenting of looters' trenches. This research indicates that the site developed mainly during the Late and Terminal Classic periods (Fialko 2000b). Significantly, a lithic workshop in the area of Plaza A at Laberinto was discovered. Investigations in 2000 indicate that this workshop was associated with the southwestern corner of Structure 5. The most important materials found in the workshop were nodules, tools and debitage which formed a layer between 25 and 38 cm thick. The lithic material was mainly located in the humus layer of all of the excavated test pits. In sum, 14,930 lithic artefacts were discovered in the investigated area. Of note, is the discovery in the two test pits (2J and 7C) of Terminal Classic sherds besides the lithic material (Fialko 2000b). Research conducted in the area of the workshop indicates that it might have been used mainly during the Terminal Classic period since the greatest concentration of lithic materials was discovered at the surface or slightly below it and in some cases, above or within layers containing Terminal Classic sherds.

El Bayal located 2 km southwest of Poza Maya was investigated in 1999 by Fialko et al. (Fialko 1999b, Fialko et al. 1999) as part of the Regional Archaeology Programme. Data from this research indicates that the site was first settled in the Preclassic period and experienced its apogee during the Tepeu 2 phase. However, no vestiges of Terminal Classic and Postclassic occupation were documented at El Bayal (Fialko 1999b, Fialko et al. 1999).

Another site, Los Xateros, is located at a distance of 2.5 km west of Poza Maya in the area of Bajo La Justa. The site was also investigated by Fialko et al. (Fialko 1999b, Fialko et al. 1999). Investigations done at Los Xateros in 1999 indicate that the period of

its greatest development coincides with the Late Preclassic and Early Classic periods. The site seems to be in large part depopulated by the beginning of the Late Classic since material from the Tepeu phase is very scarce. No traces of Terminal Classic or Postclassic occupation were documented. Los Xateros seems to be very similar in its occupational history to Poza Maya which also thrived during the Early Classic. Subsequently, it was in large part depopulated in the Late Classic (Fialko et al. 1999: 16–27). It appears that a close relationship between both sites might have existed and it is possible that Los Xateros was subjugated by Poza Maya.

There are other minor, secondary centres as well as very small sites located in the area of Triangulo Park that were discovered and mapped by Vilma Fialko. Many of them are located between Nakum and Naranjo in the area of the Middle Valley of Holmul River (see: Fialko and Ramírez 2002). However, we still do not have sufficient data concerning the dating and pre-hispanic history of many of these sites.

INTERSITE AREAS

Apart from archaeological research that focused on the excavations of the central monumental part of large sites as well as several small secondary sites in the area of Triangulo Park, 3 important projects which focused on the investigation of the peripheries of important sites and intersite areas were carried out. These projects are: The Central Peten Historical Ecology Project directed by Don Rice and Prudence Rice, which investigated areas to the north and south of Yaxha and Sacnab lakes; the Intersite Project led by Anabel Ford in the area between Tikal and Yaxha and the Regional Archaeology Programme which was a part of the Triangulo Project directed by Vilma Fialko.

The Central Peten Historical Ecology Project was carried out between 1972 and 1981. It involved archaeological as well as ecological studies of cultural activity and natural history in the area of the central Peten lakes (Yaxha-Sacnab, Macanche-Salpeten and Quexil-Petenxil) (Rice and Rice 1990: 123–124). Archaeological investigations focused on the mapping of settlement remains as well as on test pitting programmes which could provide information about the settlement pattern in the past. Survey transects 0.5 km wide and at least 2 km long were marked around all the above mentioned lakes. Test excavations consisted of testing individual mounds-structures rather than patio groups (Rice and Rice 1990: 124). In sum, in all 20 transects 1211 mounds that were grouped in 368 distinct loci were mapped; 284 (23.5%) of all the mounds surveyed in the transects were sampled by test pit excavations. Additionally, 60 other occupation loci located outside the transects were sampled.

Data recovered from the transects marked in the Yaxha-Sacnab lakes are of special interest to us. Overall, for the Yaxha-Sacnab region, the average density of structures is 58.6 str/km²; but if we subtract the area of uninhabitable *bajos*, we are left with about 75.4 str/km² in inhabitable terrain. 148 structures (25.3% of all discovered structures) in this area were tested. Statistical data obtained, thanks to the sampling programme, indicate that the structure density in the Late Classic was 46.7 str/km² (for overall terrain) and 60.1 str/km² (for inhabitable land, without the *bajos*) and it decreased drastically to 5.5 str/km² (for overall terrain) and 7.0 str/km² (for inhabitable land only) during the

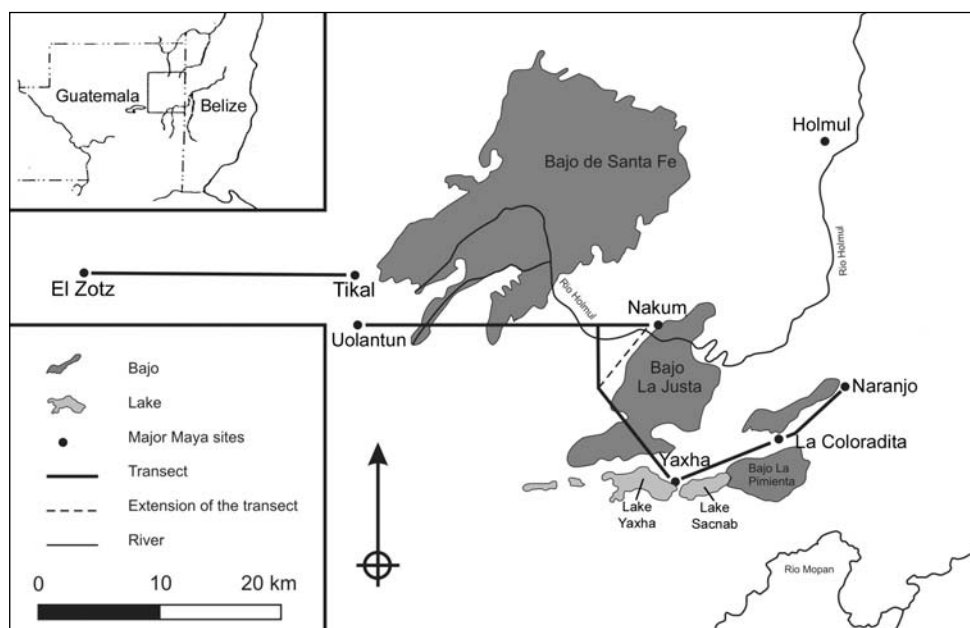
Terminal Classic. Rice and Rice (1990) assume 5.4 people as an average number of people living in one structure. Thus, according to the authors, the data concerning population density for the Yaxha-Sacnab region would be: 211.8 persons/km² (for overall terrain) and 272.6 persons/km² (for inhabitable land only) during the Late Classic and 29.7 persons/km² and 37.8 persons/km² respectively for the Terminal Classic. The data recovered from the transects marked in the region of Macanche-Salpeten and Quexil-Petenxil also indicate a drastic decrease in occupation during the Terminal Classic period. According to hypothetical numbers given by Rices, the Yaxha-Sacnab region was losing between 118.8 and 11.82 persons per annum during the Terminal Classic. The Macanche-Salpeten basin lost between 53.66 and 22.05 persons per annum while the Quexil-Petenxil basin lost between 44.12 and 11.06 persons per annum during the same period (Rice and Rice 1990).

Thus, the Rices investigation argues for a significant loss of population and cultural activity during the Terminal Classic in the area of Yaxha and Sacnab lakes. However, it must be stressed that the material from this period was mainly found within two transects which flank the Yaxha site and were marked on the north side of Lake Yaxha (Suboperations 1 and 2). Terminal Classic occupation on the two above mentioned transects was determined from debris in the humus and collapse layers of residential platforms and two mounds in the small site of Oxlaj. Moreover, Suboperation 1 was found to contain evidence of Terminal Classic architectural activity which included retaining walls discovered during testing of Mounds 009 and 014 (Rice and Rice 1980: 446–447). To a lesser extent, Terminal Classic materials were discovered in two minor centres (Ixtinto and Manax) located on the south side of Lake Yaxha (P. Rice 1986: 271, 273; Rice and Rice 1980: 447). Nevertheless, no Terminal Classic ceramics were recovered from the Sacnab Lake basin (P. Rice 1986: 273).

Anabel Ford's work in 1978, the Intersite Project, focused on the settlement between Yaxha and Tikal. The project marked a 28 km long and 0.5 km wide transect connecting both sites. In this area 40% (or 3.2 km²) of the inhabitable terrain was surveyed and 10% of all discovered residential units were sampled. In sum, 386 structures grouped into 154 residential units were discovered in an area of 3.2 km² (Ford 1986).

Data recovered during the Tikal-Yaxha transect investigations imply that the greatest level of development occurred during the Late Classic. Late Classic ceramics constitute 51% of all the discovered material and were found in 92% of all sampled sites. In contrast, material from the Terminal Classic represents only 11% of the entire collection. However, Terminal Classic sherds were identified in as many as 85% of all sampled loci. Additionally, it must be stressed that the Terminal Classic material was present in all sampled areas within 14 km of Tikal and in only 66% of all sampled sites within 14 km of Yaxha (Ford 1986: 62–63). No Postclassic materials were discovered in the transect. However, Anabel Ford mentions two structures discovered along the transect "which evidences local Postclassic style residential construction" (Ford 1986: 59).

During the research of Regional Archaeology Programme directed by Vilma Fialko, 3 transects, each of them 0.5 km wide were marked. The first one connected Yaxha and Nakum and was investigated in 1994, the second connecting Nakum and Tikal was investigated in 1995 and the third joining Yaxha and Naranjo was investigated in 1996. Another transect that connected Tikal and El Zotz was also marked (Fig. 74); however,



74. Map with transects marked and investigated by Vilma Fialko's Regional Archaeology Programme (by A. Danecki, based on Fialko 1997d)

this was located outside the Triangulo Park region. Several years of lengthy investigations brought about the discovery of 210 sites which were mapped; 40% of them tested by small excavations. In sum, 301 test pits excavations were opened; most of them measured 1.5 x 1.5 m. Test pits were localized mainly in the plazas, patios, and back sides of the buildings in places lying on an axis with looters' tunnels or trenches and at the base of the *taluds* of elevated plazas (Fialko 1997b, 1997c). Additionally, several larger sites localized in the area or in the vicinity of transects were investigated more extensively, among them a few sites already described: Poza Maya, La Pochitoca, Tintalito, El Bajón, La Blanca and El Zapote (the last two are outside my area of interest and are hence not described here).

In the transect connecting Yaxha and Naranjo, sixty two sites were discovered (Fialko 2004: 179) and more than forty sites were tested. Although Fialko did not give a percentage content of Late Classic materials in relation to the rest of the discovered materials, all the data included in the reports (Fialko 1997b, 1997c) indicate that the archaeological finds from this period dominate in the majority of tested sites. Terminal Classic material was discovered in the following sites: Caoba Negro, Tranquilina, Bejuquillo, Tecolote, El Taller, La Flauta, Quebrada Seca, Colmenar, Caballon, Taco/Campana "A", Taco, Chacoj, Durmiente, Pichon, Tabanazo, La Calaca, El Guamil, El Manantial). In some of the sites (El Taller, Taco/Campana "A", Chacoj, Durmiente, Pichon, Tabanazo), the entire material recovered in all test-pits or looters' trenches was ascribed as diagnostic for the Tepeu 2-3 or Tepeu 3 phase. It must be stressed however that in the case of nine

sites, material from all suboperations was classified generally as Tepeu (Fialko 1997b). Therefore we are not sure if the material from these sites is from the Late or the Terminal Classic period.

Twenty four sites were discovered in the transect connecting Yaxha and Nakum (Fialko 1996a: 18). Other sites associated with the Yaxha-Nakum transect are Poza Maya, Tintalito and El Bajón. They were denominated by Fialko (1997b) as suburban centres and consequently, were more thoroughly investigated. However, these sites are not included in this description since they have already been analysed. If we assume that the material from several sites which are generally classified as Tepeu represents the Late Classic period, then the majority, if not all of the tested sites contain material predominantly from this period. Terminal Classic sherds were recovered and described as diagnostic in the case of suboperations registered at the following sites: La Jugada, El Cabro, Malerio, Escobal and Ramonal (not including suburban centres) (Fialko 1997b, 1997c).

Finally, thirty four sites from the Nakum-Tikal transect were tested (including the two suburban centres associated with Tikal, Uolantun and Corozal). The great majority of them yielded Late Classic materials. Traces of Terminal Classic occupation were detected in the following sites (excluding Corozal): Nakum 1, Pizote, Cedro Viejo, Sip, Zapote Viejo, Corozal Laberinto, Chiboj, Chiquinche, Tambor, Chalpate, Guarumo, La Miseria, Sach SO; however, only in the case of three of them (Cedro Viejo, Sip, Sach SO) material excavated in all suboperations was described as diagnostic for this period (Fialko 1997b, 1997c).

It must be stressed that the archaeological material from test pit excavations do not provide us with completely reliable information about the dating of sites discovered in the area of all investigated transects. However, all recovered data indicate that most of these sites had their highest level of development during the Late Classic period. The subsequent Terminal Classic period is represented in a smaller number of sites and may be indicative of a decrease in settlement. The number of sites in which traces of the Terminal Classic occupation were documented indicates that this decrease was not very severe. Some sites must have been inhabited even during the Terminal Classic although by far fewer people. It is also possible that while some centres were abandoned, others (especially the smaller ones in the area of the Fialko intersites) that yielded exclusively or mainly Terminal Classic materials were occupied or constructed during this turbulent period.

Chapter IV

SUMMARY AND CONCLUSIONS

THE TERMINAL CLASSIC PERIOD IN THE SOUTHERN MAYA LOWLANDS: AN OUTLINE

The Terminal Classic period has recently been the subject of important studies and publications, especially in the book edited by Arthur Demarest, Prudence Rice and Don Rice (2004). Thus, I will limit myself to briefly outlining the cultural situation in the various regions of the Southern Maya Lowlands during this span of time. Recent studies indicate that the situation in the Maya Lowlands was very complex during the Terminal Classic period. While some lowland centres had collapsed before the beginning of the Terminal Classic or during that period, others underwent a transformation and adjusted themselves to new political and economic conditions and continued to develop until the Postclassic or Colonial period.

Though the dating of this period varies between different regions and even between different centres in the Southern Lowlands, it is generally agreed that its beginning can be placed sometime between AD 800 and 850, while the end occurred between the years AD 900-950 or later. In the majority of Maya centres, this period is characterised by the demise of the fundamental elements of a centralised political organisation and divine kingship. Certain cultural activities of rulers and the elite, such as the practice of burying kings in elaborate tombs situated within the boundaries of temple-pyramids or the erection of carved dynastic monuments, such as stelae and altars, disappeared during this period. The output and number of artists and craftsmen skilled in the manufacture of fine pottery decorated with mythological scenes and scenes depicting the lives of kings and their high-status companions declined and ultimately disappeared. Most of the centres were depopulated and there was a drastic reduction in the construction of public architecture and living quarters for ordinary citizens.

Centres situated in the Usumacinta and Petexbatun regions were among the first in the Southern Maya Lowlands to experience a sudden and drastic collapse. Even before the beginning of the Terminal Classic period, construction activity ceased in many of these sites and they were largely abandoned by their inhabitants. In the Usumacinta region, we observe a rapid burgeoning of elite groups during the 7th century as well as the

sharing of power between divine rulers – *k'uhul ajaw* – and lower-ranking officials bearing the *sajal* title. A situation of this sort points to an impairment and decentralisation of royal rule. This phenomenon is accompanied by an increase in elite activity manifested by mutual visits, the formation of alliances and the making of war, all of which seem to have intensified by the end of the Classic period (Schele and Mathews 1991; Demarest, Rice and Rice 2004: 552). The last inscribed date found in Yaxchilan was AD 808 and in Piedras Negras, AD 810. It is noteworthy that the last piece of information regarding the ruler of the city of Piedras Negras appears in the context of a conflict, in the course of which he was defeated and captured by the king of Yaxchilan (Martin and Grube 2000: 153). During archaeological excavations carried out in the central part of Piedras Negras, traces of burning and destruction related to the final period of the city were discovered. Some carved monuments, like Stela 7, were mutilated. Throne 1, discovered in Palace J-6, was smashed and its masonry piers were probably pulled down by force. Another monument (Throne 2) erected in Structure J-18 might have also been destroyed. Other traces of destruction were detected in the temple-pyramids of the South Group Court where the “disturbed condition of column altars and the disappearance of walls” were noted (Holley 1983: 199–200). Moreover, the royal palace structure J-12 was burned; many intentionally broken vessels were discovered in its interior. These vessels were probably left before or at the time of the abandonment (Holley 1983). Archaeological investigations at Piedras Negras indicate that the fall of the city was very rapid and it took place at the end of the Late Classic period (Houston et al. 2000). Terminal Classic occupation at Piedras Negras is very limited and the site seems to have been almost completely deserted during this period. The remnant population of this phase occupied the city in very small and dispersed pockets.

Traces of conflicts connected with the end of the centre were also discovered in Yaxchilan. One of the complexes in Yaxchilan known as the Small Acropolis (which is made up of Structures 42 to 52, constructed on an elevation) was fortified by the end of the Late Classic period with rapidly constructed walls, in the vicinity of which many projectile points were found. This might be evidence for combat that took place in this area. In all probability, the Small Acropolis was the last refuge for the local elite as well as the rest of the inhabitants of Yaxchilan (Mathews 1996: 21) during warfare caused by a foreign raid or internal conflict.

Investigations in the Petexbatun region indicate that this area was affected by destructive wars which led to the collapse of the majority of the centres even before the beginning of the Terminal Classic period (Demarest 1997, Demarest et al. 1997, Houston 1993; Martin and Grube 2000: 55–67). It seems likely that competition for access to exotic trade products led to the intensification of warfare and the formation of political alliances between the various centres in this area. Archaeological and epigraphic data indicates that the period between AD 760 and 830 in the Petexbatun region was a time of wars and chaos, marked by a drastic decrease in construction activity, which was limited to the construction of fortifications around the most important centres, villages, crop fields and sources of water. A drastic population decline also took place, with only 5–10% of the number seen in the Early Facet of the Nacimiento Phase (AD 600–760) (Demarest 1997: 219–220, Demarest et al. 1997: 231). By the end of the Late Facet of the Nacimiento

Phase (AD 760-830), Dos Pilas was almost entirely abandoned by the people who remained in the city even after the defeat of their ruler in AD 761 (Palka 1997). Aguateca was destroyed by unknown invaders (Inomata 1995, 1997); other centres such as Tamarindito or Arroyo de Piedra were also depopulated and eventually fell (Demarest 1997: 220; Escobedo 1997, Valdes 1997).

By the beginning of the Terminal Classic period, which in the Petexbatun region is represented by the Sepens phase (the years AD 830–930), the largest centres were already in ruin. Thus the fall of the Maya civilisation in this region was almost complete at the beginning of this period. Three centres of the Pasión region (which also contains the Petexbatun region): Seibal, Altar de Sacrificios and Punta de Chimino continued to develop during the Terminal Classic period despite the fact that the region was depopulated to a large extent (Adams 1971, 1973b; Sabloff 1973; Demarest 1997). Seibal probably survived the crisis owing to a number of factors, including its defensive location, access to water sources, farming terraces situated in the fortified part of the city and foreign interference from Ucanal whose ruler was responsible for the accession of Wat'ul Chatel to the Seibal throne (Schele and Mathews 1998: 179). It is also necessary to mention a new style of art that appears at this time in Seibal and draws on the styles of the Northern Lowlands and/or Central Mexico. This new art style probably went hand in hand with a new ideology that was intended to strengthen the position of the local rulers and augment their rights to the throne while leading to political and social consolidation of this war-ravaged region (Tourtellot, González 2004; Demarest, Rice, Rice 2004: 552). The survival of Altar de Sacrificios and Punta de Chimino was mainly a result of their defensive location, though the planned and protected cultivation field system of Punta de Chimino must have also played a major role in its survival.

Wars and political competition during the 8th and the beginning of the 9th century led to an almost complete depopulation of the Petexbatun region and presumably most of the Pasión region as well. Such a rapid depopulation was, according to Demarest (2004), caused by the fact that the inhabitants migrated to other regions after AD 760. Some of the inhabitants settled in Punta de Chimino, Seibal and Altar de Sacrificios. Other groups might have ventured to Cancuen, a centre situated further to the south. This migration may be attested by the introduction of “distinctive middle Pasión ceramic modes and types” to that region (Demarest 2004: 118). Some people from the Pasión region might have also moved to the central Peten or even further to the east. According to Demarest (2004: 119), the swift demographic increase or even overpopulation observed in some regions during the Tepeu 2 phase may be the result of migration from the west.

Recent investigations at Cancuen carried out by Arthur Demarest and his team indicate that the end of this centre was very violent. Demarest's research showed that AD 800 at least 32 people were murdered, dismembered and then dumped into a ceremonial cistern. The cistern contained a large amount of luxurious goods that were left with the people who were killed, indicating their noble status. It is possible that people who were assassinated were members of a royal family (Barrientos 2007; Barrientos et al. 2006). At a distance of more than 70 m from the cistern, skeletons which most probably belonged to Kan Ma'x (the last known ruler of Cancuen) and his wife were found buried in shallow graves. Moreover, close to a riverside pier 12 more corpses were discovered and

they might belong to the guards of the port who were also killed. Unfortunately, it is uncertain if the massacre documented at Cancuen was a result of invasion from outside or internal rebellion (although the site of Machaquila is a possible culprit [Barrientos 2007]). Whoever was responsible for this violent event left the site never to return. Data from Cancuen and other Pasi6n sites seem to indicate that at the end of the Classic period the concept of warfare might have changed. Formerly, it was important to “defeat” one’s enemy, subjugate him and more importantly, turn him into a source of tribute. But now it became important to completely eliminate one’s enemy from the political arena, in some cases by annihilating the royal family and nobles.

During the Terminal Classic period, Maya centres in the Western Zone suffered very different fates. The fall of Palenque was rather early, as was that of Piedras Negras. The last known date from that centre – the year AD 799, was not recorded on a stone monument but on a vessel. Information regarding the accession of a ruler named Janaab’ Pakal was written below that date (Martin and Grube 2000: 175). Archaeological investigations indicate that elite activity ceased in Palenque and its population greatly declined by the end of the Early Balunte phase or the final part of the Late Classic period. The Terminal Classic Late Balunte phase is poorly represented and marked by very scarce amount of Fine Orange ware (P. Rice and Forsyth 2004: 42). Additionally, investigations carried out in the residential area surrounding the site of Palenque documented a dispersal in the settlement pattern during the Balunte phase (Stuardo 2001: 41). The collapse of Palenque was accompanied by the increased political dominance of neighbouring centres such as Comalcalco or Chinkultic, where we observe important development activity during the Terminal Classic period (Peniche 1973 cited in P. Rice and Forsyth 2004; Perez Campos 1996; Romero Rivera 1995: 24–25).

A drastic collapse took place during the Terminal Classic period in two large centres of the Central Zone: Tikal and Calakmul. At Tikal we observe a very profound (about 80–85%) population decrease by the beginning of the Terminal Classic Eznab phase, both in the centre and at the peripheries (Culbert et al. 1990: Tables 5.1 and 5.2, Fry 1969: 166). This was accompanied by a decline in construction activity and the fragmentation of political authority. The remnant population of Tikal was concentrated in the central part of the city. The inhabitants of Tikal resided in structures that had been built earlier, including palaces and temples that once housed ceremonial and ritual activities. They limited themselves to the small and minute remodellings of some of the existing complexes and buildings. Members of the elite must have survived in the city at least up to the year AD 869, when the last dated monument (Stela 11) was erected in Tikal.

At Calakmul and many neighbouring sites of the R6o Bec region we also observe a very drastic demographic loss during the Terminal Classic period. Investigations indicate that the rural area of the Calakmul kingdom witnessed an approximately 90% loss of population during the Terminal Classic period (Braswell et al. 2004: 188). Despite the enormous crisis, the elite members and their servants continued their activity in the Calakmul epicentre, rebuilding some of the existing structures and dedicating carved monuments until the 9th century or even later. During the Terminal Classic, the people in question adopted a combined temple-palace architectural form characteristic of the contemporaneous Puuc sites (Braswell et al. 2004).

Because of the political weakness of these two large Maya centres, their outlying secondary centres visibly reinforced their position or even gained independence. In the second half of the 9th century, the rulers of Tikal's formerly subordinate centres, such as nearby Ixlu and Jimbal or the more distant Xultun, started dedicating carved monuments using the Tikal Emblem Glyph – a distinct indication of the usurpation of power. Similarly, the rulers of small secondary centres located close to Calakmul dedicated carved monuments and undertook significant architectural enterprises in the 9th century.

Investigations carried out at Uaxactun – the northern neighbour of Tikal indicate that the Terminal Classic period at this site may be divided into two stages. Despite the abandonment of the city centre and the outskirts by the majority of the inhabitants during the Tepeu 3 phase (Valdes and Fahsen 2004, Acevedo and Paz 1991), an elite group capable of engineering an ambitious development programme in the area of Group A remained in the city. The elite activity lasted for a relatively long time, at least till the year AD 889, when Stela 12 was dedicated by the local ruler (Valdes, Fahsen, Escobedo 1999, Valdes and Fahsen 2004: 156). The end of elite activity may have been drastic and swift since archaeological research done at Uaxactun indicates that Structures A-II, A-IV as well as Structure W (situated within the boundaries of Complex A-V) were probably never finished (Smith 1950). The second Terminal Classic occupation stage can be dated to the period when pottery of the Tepeu 3 horizon was still in production but construction activity had already ceased in the city and a large number of buildings were beginning to go to ruin. Presumably, some time after Stela 12 had been erected Uaxactun was abandoned by the residual elite population. Subsequently, the old palaces and temples were reoccupied by squatters who blocked passages to some of the rooms, threw their refuse into the courtyards and living quarters, and buried their deceased in collapsed chambers. This “post-constructional” stage must be related to some vestige left in Complex A-V and presumably, also in Temple E-II. These “degenerate people”, as Smith calls them (1950: 44), probably had nothing in common with the original inhabitants of the old palaces and may have arrived in the city centre from some peripheral areas of the city (see: Valdes 1988: 22).

Multidisciplinary research carried out in the Central Peten Lakes area shows that the Terminal Classic period in this region is characterised by the beginning of a reorganisation of the settlement pattern. A distinctive feature of this process was decreased occupation in the mainland and an increase in occupation in places of a defensive nature, such as islands and peninsulas. Such a settlement model was particularly characteristic of this area during the Postclassic period (D. Rice 1986: 327). Despite a drastic decrease in the population density during the Terminal Classic period, the area around the Central Peten lakes was not completely abandoned (Rice and Rice 2004). There was a continuation in occupation from the Classic to the Postclassic period in all the lake basins which were surveyed by the Rices. This continuation in occupation indicates that the Terminal Classic period was a time of transformation and established the foundations of the Postclassic period in that area. Investigations indicate that during the Terminal Classic, important migrations occurred in the Central Peten lakes area. Available archaeological data may indicate that a number of refugees from the Pasión region arrived in the above-mentioned area (Rice and Rice 2004). On the other hand, some groups of people may have migrated

from this area to the northern Yucatan during the Late and Terminal Classic periods (Boot 1996; Schele, Grube, Boot 1998).

Northwestern Peten also saw a different fate during the Terminal Classic period. While the large regional centre of El Peru underwent a crisis that was marked by, among other episodes, a violent destruction of carved monuments at the site (Freidel and Escobedo 2005: 345–347), other smaller centres like La Joyanca continued a significant development and rebuilding programme (Arnould and Forné 2004: 33–34; Arnould, Breuil-Martínez and Ponciano 2004).

In southeastern Peten, a decline in population and public architecture in some of the centres coincided with a time of prosperity in others. In Ixtonton, Ucanal, Sacul and a few other centres, concentration of power, population and architectural activities can be observed. This combination enabled them to outlive the collapse of their neighbours by almost 200 years (Laporte 2004; Laporte and Quezada 1998; Laporte and Mejía 2002).

During the Terminal Classic period, a similar situation can be observed in Belize. As some of the centres were being depopulated, a stable population or even a demographic increase can be observed in others. In Lamanai and other coastal sites, occupation continued into the colonial period (Pendergast 1981, 1985, 1986). At Barton Ramie, which is located in the Belize River Valley, a continuation in occupation from the Late and Terminal Classic Spanish Lookout phase (AD 700–950) to the Postclassic New Town phase has been documented (c.a. AD 950–1300) (Willey et al. 1965; Willey 1973). Some of the centres in Belize managed to outlast the collapse due to their favourable location in the vicinity of the Caribbean seacoast or rivers (ex. Northern River Lagoon, Saktunja, Caye Coco and Progreso Lagoon) (Masson and Mock 2004). Additionally, they were also situated outside the western and central part of the Southern Lowlands, where the political and economical crisis was the most intense. In the above mentioned centres, emphasis was put on long-distance and coastal trade as well as on inland-coastal exchange of products; we also observe closer ties to northern Yucatan and other parts of Mesoamerica in those centres. It seems that Chichen Itza at least partially participated in long-distance trade with the surviving centres in Belize. Stable development during the Terminal Classic period was also observed in Nohmul where ceramics with northern characteristics were found. Two buildings in this centre were also very similar in plan to structures from Chichen Itza (Hammond et al. 1988; Chase and Chase 1982).

In Caracol, the population continued to be high during the Terminal Classic and monuments were erected till the end of the ninth century. However, all archaeological data indicate that the last deposits discovered on the floors of many palace buildings at Caracol were left during a swift and unplanned abandonment of the epicentre of the city that must have taken place before the year AD 900. The above-mentioned vestiges as well as fragments of weaponry that were discovered on many floors (stemmed points and a probable mace head) may point to the fact that the end of Caracol might have been the result of conflict (Chase and Chase 1994, 2004).

Two the most important centres of the Southeastern Maya Zone: Copan and Quirigua suffered a profound crisis at the end of the Classic period. In the case of Copan, the fall of the city was most probably a three-staged process that was initiated by the impairment and decentralisation of political and religious authority during the 8-th and the beginning

of the 9-th century, followed by a complete collapse of royal power around the year AD 822 and finally, the depopulation of the Copan Valley (Fash and Sharer 1991; Sharer 1994: 340). The time period over which the valley was deserted is disputed; based on the ceramic chronology, a number of the scholars believe that it took place during the Terminal Classic period and that by the end of the 9-th century, the valley was almost entirely abandoned (Fash, Andrews, Manahan 2004). Based on the dating of obsidian artefacts by the hydration method, other scholars assume that the abandonment of the valley was a long-term process and that the area in question was inhabited until the 13-th or even 14-th century (Webster and Freter 1990; Freter 1992; Webster, Freter and Storey 2004).

Quirigua also suffered from a crisis during the Terminal Classic period. Although the last dated monument at the site was dedicated in AD 810, limited architectural activity continued there in the ninth century (Sharer 1991). After AD 900, Quirigua was deserted, as also were a majority of the sites situated on the peripheries of the city as well as others located in the Lower Motagua Valley (Sharer 1988: 42). It should be also mentioned that archaeological evidence indicates that Quirigua as well as Copan might have been re-settled by small groups of "foreigners" in the Terminal Classic period, however these new people appeared after the collapse of the political order and the abandonment of these two important southeastern centres (Sharer and Traxler 2006).

THE TERMINAL CLASSIC IN THE AREA OF TRIANGULO PARK: PATTERNS OF COLLAPSE AND DEVELOPMENT

Archaeological data gathered so far shows that the cultural situation during the Terminal Classic period in the Triangulo Park area was very diverse. Whereas some centres were almost completely depopulated by the beginning of this period, others thrived for 100 years or longer. The Terminal Classic should perhaps be perceived as a period of great transformation and irreversible change, resulting in the collapse of some centres and the concomitant rise of new political and economic powers.

Based on the size and political role of the Maya centres situated in the Triangulo Park area, I propose to classify all analysed sites into four groups. The first and most important group is represented by Naranjo, a major site which was also the most important political centre of the park region during the Classic period. During the Terminal Classic period this centre shared the same fate as the other large centres of the Southern Maya Lowlands which were in large part depopulated and went into a socio-political crisis resulting in stagnation. The second group is represented by the large city of Yaxha and the smaller site of Nakum – two centres, which played a secondary role in this region during the Late Classic. During the Terminal Classic, they adjusted to the new political and economic conditions and while Yaxha continued to enjoy stable development, Nakum was positively thriving. Small secondary centres can be included among the third group. This group comprises of archaeological sites located in rural areas. These sites clearly stand out in their size and complex architecture (including public-monumental structures and complexes) from other settlement sites documented in the intersite areas. With the ex-

ception of some (including El Tigre and El Carmen) located close to Nakum and most probably politically related to it, the majority of these centres went into decline and were mostly or entirely depopulated during the Terminal Classic. The last group is represented by intersite or rural settlement sites. These settlements are of various sizes ranging from a single independent structure to a few patio groups, usually modest in size. In this group we can clearly observe a decrease in settlement between the Late and Terminal Classic periods. Nevertheless, unlike most regions of the Southern Maya Lowland, the settlement decrease is not drastic. Archaeological research indicates that some rural areas were still inhabited during the Terminal Classic period.

Naranjo – socio-political collapse of a regional capital

Naranjo was one of the most important and powerful centres during the Late Classic in the north-eastern Peten region. It was involved in the conflict between two superpowers of the Southern Maya Lowlands, Tikal and Calakmul. From at least AD 546 onwards, Naranjo was under the influence of Calakmul. Inscriptions describe the accession of a Naranjo lord (Aj Wosal) in that year, under the auspices of Tuun K'ab'Hix, the then king of Calakmul (Martin and Grube 2000: 104). After Tikal regained its political power by defeating Calakmul in AD 695, Naranjo was attacked by Tikal. Inscriptions from Lintel 2 of Tikal Temple IV record a “star war” attack in February AD 744 against Naranjo (Martin and Grube 2000: 49, 78–79). Its king (Yax Mayuy Chan Chaak) was captured and probably sacrificed. Several years later in AD 748, Tikal captured an important noble whose title “wuk tzuk” (seven provinces?) connects him with the Naranjo-Yaxha region (Grube 2004: 203–204). There is a distinct hiatus in the dedication of inscribed monuments in Naranjo after its fall and it seems that after AD 744 this centre was subjugated by Tikal. However, one of the last rulers of Naranjo – Itzamnaaj K'awiil (reigning from AD 784 to 810 or longer) managed to strengthen the prestige of the city. Itzamnaaj K'awiil dedicated six stelae, and one altar, and led a war campaign against Yaxha and its satellites in AD 799, resulting in the defeat of that centre. The final reference in the inscriptions to Itzamnaaj K'awiil comes from AD 810 (Martin and Grube 2000, Grube 2000, 2004).

The last dated monument in Naranjo is Stela 32, dedicated by the ruler Waxaklajuun Ub'aah K'awiil in AD 820. Based on its style, another monument (Stela 9) can be dated to an even later period. According to Martin and Grube (2000: 83), its “multi-figure composition is typical of Cycle 10” or of the period after AD 830 (see also Grube 2004: 210). The composition of the stela is visibly different from the earlier representations on the stelae from Naranjo, where the image of a single ruler, often standing on the bellied captive dominated. The presence of many figures on Stela 9 may be an indication of the decentralisation of royal power. A similar phenomenon can be observed in many other Maya centres at the end of the Late Classic and during the Terminal Classic, where the ruler is often shown with lavishly dressed nobles or individuals of high status. Multifigural composition and division of Stela 9 to the multiply registers represents stylistical analogies with carved monuments from the Northern Lowlands. It must be stressed that northern features are also seen in many other Terminal Classic carved monuments from the Southern Maya Lowland sites (e.g. Jimbal, Ixlu, Ucanal, sites from the Central Peten lakes area [Rice and Rice 2004]) and they indicate extremely close relations between

both of the regions during the time of political and economic destabilisation in the Southern Maya Lowlands.

The beginning of the Terminal Classic in Naranjo, according to Fialko, can be dated to about AD 850 (Fialko et al. 2002, 2003). Recent research in Naranjo (Aquino 2007; Fialko 2005a; Fialko et al. 2002, 2003, 2004) indicates that the site almost completely lost its political and economic power during the Terminal Classic. However, significant groups of people were able to remain in the city and continue a building programme, albeit on a modest scale (Aquino 2007). To date, the most important Terminal Classic architectural activity in the epicentre has been documented in its central and western parts (ex. complexes of Acropolis B-5 and Group A-19) (Aquino 2007). Recent investigations carried out in the southwestern periphery of Naranjo documented very important traces of Terminal Classic occupation and architectural activity (Fialko et al. 2007). However, if we compare the cultural situation at Naranjo between the Late and Terminal Classic periods, it is clear that during the 9th century the city entered a period of political and economical crisis. In most cases, the Terminal Classic inhabitants of Naranjo epicentre limited their architectural activities to minor modifications of existing buildings or to the construction of low platforms or walls using material quarried from older, dismantled structures. The changes of the Terminal Classic period in Naranjo is evidenced by the occupation of some of the former temples that had been used exclusively as important ceremonial places (e.g. Temple A-18). A similar tendency can also be observed in Tikal and Calakmul. During the Eznab phase in Tikal, several structures that had formerly functioned as temples were inhabited (Culbert 1973b). On the other hand, during the Terminal Classic in Calakmul, former temples continued to function as such while also being used as palaces (Braswell et al. 2004).

The crisis of Naranjo during the Terminal Classic period is also evidenced in its ceramic assemblage. To date, no fine paste ceramics have been found at the site (Aquino 2007). This fact indicates that Naranjo lost control over the most important trade routes during this time resulting in very limited access to the regions that manufactured this group of Terminal Classic ceramics. The other possibility is that the politico-economical collapse of this city preceded the introduction of fine paste ceramics to this area.

Weakness and crisis in Naranjo probably provided the impetus for its neighbouring sites, once subordinate to Naranjo's rulers, to free themselves from its influence and gain independence. Beginning in AD 820, local rulers of Xunantunich (which was probably subjugated to Naranjo in the Late Classic) initiated the dedication of carved monuments (Le Count et al. 2002). The political independence gained by Xunantunich elites is also evidenced by the usage of a new local emblem glyph for the first time. This emblem glyph has been recently identified on the newly discovered Panel 2 from Xunantunich (Grube and Martin 2004). Two small secondary sites located close to Naranjo, El Aguacate and Chunhuitz also have carved monuments. Their style indicates that they are of Late or Terminal Classic date (Grube 2004: 211). In all likelihood, the dedication of these carved monuments by local lords indicates that the central authority of Naranjo was questioned at the end of the Classic period. The weakness and crisis in Naranjo may have also occasioned the independence of Yaxha and Nakum (although it is also possible that Nakum was subordinated to Tikal during the Late Classic).

During the Terminal Classic period in the Tikal, Calakmul and Palenque kingdoms and in many areas of the Southern Maya Lowlands, there is a similar pattern of depopulation and devolution of power from the large regional capitals accompanied by the corresponding independence of at least some of the centres once subordinated to them. An important indication of political instability in the Tikal kingdom during the Terminal Classic period is the dedication of carved monuments commenced by rulers of secondary centres who used the Tikal emblem glyph. In AD 879, the ruler of Ixlu used the title of the *k'uhul ajaw* of Tikal on Altar 2. Ten years later the Tikal emblem glyph appeared in monuments from Jimbal (Stela 2) and Xultun (Stela 6) (Schele and Freidel 1990: 391; Valdes and Fahsen 2004: 151). These data seem to indicate that these local rulers seized full control over centres that had once been subordinate to Tikal and laid claim to the royal title of their former masters.

During the 9th century, stelae were also dedicated in the secondary centres (Oxpemul, La Muñeca) situated within the boundaries of the Calakmul kingdom. Stela 7 from Oxpemul is dated to the year AD 830, and Stelae 13 and 1 from La Muñeca are dated to AD 879 and 889, respectively. Other carved monuments that were found in both of these centres are certainly of an even later date (Martin and Grube 2000: 115). The occurrence of stelae dating to such a late period in the secondary centres probably reflects irreversible political changes that took place in the kingdom of Calakmul at that time and are related to the weakening position of the capital with the concomitant political independence of its former smaller secondary centres.

The fact that during the Terminal Classic many secondary sites gained independence and prospered for a brief time indicates that they were not completely dependent on, and economically subordinated to, their hegemon during the Late Classic. Indeed, if this was the case, the fall of the regional centres would have also deeply affected the survival of their dependants.

Nakum and Yaxha – continuity and cultural development

Yaxha is one of the few centres in the Triangulo Park area with copious traces of occupation and civic-ceremonial construction activity during the Terminal Classic. During most of the Classic period Yaxha was located in a zone of competition between the kingdoms of Tikal and Naranjo (the latter belonged to the wider Calakmul sphere). Inscriptions from many carved monuments (Grube 2000) as well as similarities in architecture (as exemplified by the presence of the Twin Pyramid Group in Yaxha, which was invented and widespread in Tikal) indicate especially close relations between Yaxha and Tikal. Information from inscriptions concerning military operations by Naranjo against Yaxha (in AD 710 and 799) suggests that Yaxha was under the influence of Tikal for a long time and may have served as its agent and protected its affairs in this part of the Southern Lowlands. This probably explains why Yaxha became the target of attacks from Naranjo (an ally of Calakmul). Inscriptions from two Naranjo stelae (nos. 12 and 35) mention the attack on Yaxha in AD 799. Stela 12 refers to the campaign that Itzamnaaj K'awiil carried out in February AD 799 in three locations which, in all likelihood, were satellites of Yaxha (Martin and Grube 2000: 82). Yaxha itself was attacked twice in July and September of that year and its king was captured and most probably sacrificed during a special ritual which recreated a myth in which a jaguar deity was burnt by a young god

(Grube 2004: 206–207). Thus it seems that at the turn of 8th and 9th century, Yaxha was subordinated to Naranjo. During the Terminal Classic, when authority and royal power declined in Naranjo, there is evidence that Yaxha broke free of the influence of its neighbour to gain independence. Archaeological evidence indicates that Yaxha did not experience as deep a crisis as many other Maya centres in the Southern Lowlands and most likely adjusted to the new political and economic conditions that prevailed during the Terminal Classic.

Archaeological research carried out at the site during the last few years reveals strong traces of settlement and construction activity during the Terminal Classic in all of the complexes that were explored in the core of the city. New palaces were constructed and there is evidence of significant architectural remodelling of existing ceremonial and residential structures. Archaeological data show that during the Terminal Classic, Yaxha society remained hierarchical. The elites were most likely under the leadership of a ruler whose bloodline could be traced to the Late Classic royal lineage. It seems that during the Terminal Classic period, the North Acropolis complex became a very important residence for the Yaxha elites, with several palace structures being constructed or rebuilt. The latest investigations at Yaxha in the area of the South Acropolis indicate that during the Terminal Classic period, this great palace complex underwent important rebuilding programmes while it continued to be inhabited by members of the Yaxha elite. The ruling class retained the power to realise large construction projects in the city. It is hard to estimate the number of Yaxha inhabitants during the Terminal Classic but it seems that the city did not experience severe depopulation. Hermes et al. (1999) opine that during the Terminal Classic, the dismantling of the control point situated at the end of the Lake Causeway was due to the desire of the Yaxha elites to attract people dispersed after the political and economic decline of the nearby centres. Studies by the Central Peten Historical Ecology Project in the Yaxha-Sacnab basin confirms this assumption as the largest concentration of the Terminal Classic settlement was documented in two transects on both sides of the Yaxha centre (Suboperations 1 and 2) (Rice and Rice 1980). The numerous Terminal Classic settlement remains found in these transects may indicate that a relatively large population stayed at Yaxha peripheries and that this area was not depopulated during the Terminal Classic.

During the Terminal Classic period in Yaxha, we observe the appearance of new architectural elements (Structure 90 with columns on the facade; use of small, well-worked stones for the construction of chambers in case of Structure 1 and 128 as well as the use of the same material in the construction of columns of Structure 90). These architectural elements are most probably indications of contacts between Yaxha and other Maya centres where the use of small well-worked stones (e.g. sites of the south-eastern Peten) and columns in Terminal Classic architecture was widespread. Though we can observe a continuation in settlement and heavy construction activity in Yaxha during the Terminal Classic, carved monuments were no longer dedicated. The last carved monument known from Yaxha is Stela 13, which records two dates: AD 793 and 797 (Grube 2000). During the Terminal Classic, the inhabitants of Yaxha limited themselves to the relocation of existing carved or plain monuments. Such a tendency can be observed also in other centres in the Southern Lowlands during the Terminal Classic (e.g. Tikal, [Satterthwaite 1958, Coe 1965]; La Milpa [Hammond and Tourtellot 2004] and Naranjo [Fialko et al.

2004]). At Yaxha, monuments were mainly transported to locations which in the Terminal Classic were places of great importance in the religious and political life of the city, and where the heaviest construction activity took place (East Acropolis, Maler Group and area in front of stairway leading to the North Acropolis complex).

In sum, archaeological data indicate that during the Terminal Classic period Yaxha established itself as an important socio-political centre associated with the trade route which might have existed along the Central Peten lakes where important Terminal Classic occupation and continuation of settlement between the Classic and Postclassic periods is observed (see Rice and Rice 2004). The success of Yaxha was most probably caused by the demise of its two powerful neighbours, Tikal and Naranjo.

Nakum was the scene of the greatest cultural and political development during the Terminal Classic period in the Triangulo Park area. The latest investigations of the Nakum Archaeological Project as well as limited research of the Triangulo Project in the North Sector of the site indicate that this area was still inhabited during the Terminal Classic and it underwent important building programmes (construction of Structure 96, a new version of Structure 99, remodelling in the North Acropolis and in the Merwin Group). Archaeological investigations of the Triangulo Project undertaken during the past several years in the Central and South Sectors convincingly demonstrate that all the structures erected in the previous period were rebuilt during the Terminal Classic (Structures A, D, E, F, I, N/60/61, R and 14/15). A new version of the platform of the South Acropolis with three stairways at its northern facade was constructed. Twelve patio groups located on the summit of this complex achieved their final form and extent due to the construction of many new buildings. These new structures that appeared during Terminal Classic include Buildings 24, 26 (sweatbath), 27, 62, 63, 63A, 64, 65, G, H, L, O, Q, S, Y and Z. Moreover, several new constructions were built in the sacred precinct of the Central Sector (Structures C, 12, 12A, 52 and 53).

It should be kept in mind that Nakum is situated on the banks of the Holmul River which was a very important trade and communication route during the Classic period. The Holmul River runs through the heart of the Peten. Tikal and Yaxha are situated near the tributaries of the Holmul River whereas other neighbouring sites such as Holmul and Yaloch were also built on its banks (Fialko 2000a: 689). Most likely, during the Late Classic Nakum was under the influence of one of two powerful neighbours: Tikal or Naranjo. The similarities between the architecture of Nakum monumental pyramid-temples (e.g. Structure U) and the structures of this type known from Tikal (Temple I, Temple III) may be an indication of this influence. It should be noted that Structure U from Nakum is dated to the Tepeu 2 horizon, the same period as great temples from Tikal (except Temple V [see Gómez and Vidal 1997; Gómez 1998]). As mentioned, during the Terminal Classic, a number of secondary centres, including Nakum, gained partial or complete independence from Tikal and Naranjo by taking advantage of the political and economic crises that had engulfed these two large centres. This allowed Nakum to take control over most of the important trading routes that passed through its territory, including the Holmul River.

Epigraphic data from Nakum suggest that this centre gained independence at the end of the Late or the beginning of the Terminal Classic period. In AD 815, Stela C was erected in front of Structure C. The text on this monument mentions the scattering of

“droplets” of incense at a certain place in order to commemorate a hotun (Grube and Martin 2004: 81). The name of the ruler who dedicated this monument is preserved only partly in the stela inscription but the glyph following it is most likely the Nakum emblem glyph (Grube 2000: 253, fig. 196). It is the first and only epigraphic trace indicating that a ruler having the high title of *k'uhul ajaw* was in power at Nakum. The Nakum emblem glyph is followed by the name of a place called *naah ho'chan* (“First Five Sky”), which refers to a mythical homeland of several supernaturals, including the Paddler Deities. It is worth mentioning that the Paddler Deities were widespread in the iconography of Terminal Classic monuments in many Southern Lowland Maya sites (Schele and Grube 1995: 138) and it must have played a very important role in legitimizing the power of the rulers during that turbulent time. A slightly later stela from Nakum (Stela D, dedicated in AD 849 in front of Structure D) is the last dated monument in the Triangulo Park area and indicates that Nakum predominated in this region while most of the other centres had weakened greatly (Grube 2000: 266). The ruler's headdress and a short inscription that includes the prestigious title of *ochk'in kaloomte'* which had become very popular in the Terminal Classic inscriptions (John Harris, personal communication, 2003) survived on several fragments of Stela D.

Control of the Holmul River trading route could ensure access to exotic products for the elites of Nakum as well as for the general population. Consequently, trade became an important source of wealth during the Terminal Classic. “New” architectural elements appeared in Nakum at that time. These included pillars in the facade of Structure 64 and at the end of a T-shaped courtyard situated between Structures G and H, the appearance of a round structure (Structure 12), the construction of Structure 63A with an architectural plan similar to the contemporaneous tandem structures from Chichen Itza, and the appearance of a vertical wall-moulding and reverse talud motif (with closest analogies to several Puuc centres) at the foot of the outer walls of Chambers 1 and 5 situated between Structures G and H. These architectural elements are evidence of external influences, including Northern Yucatan, (Puuc centres and Chichen Itza itself), where column and pillar structures were widespread. Evidence of further relations with the north and Chichen Itza as well with other Lowland Maya sites with important Terminal Classic occupation (e.g. Seibal and centres from Belize) may be attested by the presence of a round structure (Str. 12) at Nakum. Also, a graffiti (no. E12) depicting a legged serpent, a motif often appearing in the art of Chichen Itza, indicates close relations between these two centres. The above-mentioned data is evidence for trade contacts and cultural influences from the Northern Maya Lowlands and possibly, the migration of people from that area. Close relations with the Northern Lowlands and traces of migration from that area were documented in many other Maya centres during the Terminal Classic (among others, centres situated in the Central Peten lakes area [Rice and Rice 2004], in the south-eastern Peten [Laporte and Quezada 1998; Laporte and Mejía 2002; Laporte 2004] and in Belize [e.g. Nohmul (Hammond et al. 1988; Chase and Chase 1982)]. Nakum's trade and cultural contacts may have extended even farther. A *talud-tablero*-reverse *talud* architectural motif is found on the platform of Chamber 6, Structure E in Nakum, and it may indicate influences from Veracruz on the Gulf Coast or from Central Mexico (where *talud-tablero*-reverse *talud* style was widespread during the Epiclassic period). Therefore,

there is the distinct possibility that Nakum had far-flung trade contacts, comprising almost all of Mesoamerica.

Due to its location by the banks of the river, Nakum inhabitants had ready access to water, which was also a crucial factor in the development of that site during the Terminal Classic period when climate changes such as prolonged drought were documented in the Yucatan Peninsula (Hodell et al. 1995, 2001). The great architectural boom and demographic increase in Nakum during the Terminal Classic may have been partly caused by a population influx from neighbouring Maya centres that were undergoing political and economic collapse. Population influxes during the Terminal Classic were also documented in the Central Peten lakes area centres or in some areas in Belize (Rice and Rice 2004, Masson and Mock 2004).

During the Terminal Classic in Nakum, the South Acropolis was densely occupied by the elites. Due to a lack of living space, the existing rooms were subdivided to accommodate the increase in population; many new buildings and rooms were also added. Nakum is the only centre situated in Traingulo Park for which we are able to reconstruct the population size during the Terminal Classic. We know from archaeological research that in the Terminal Classic, almost all of the palace-residence structures in the centre of the site were inhabited. Also during this period, about 78-86% of the more peripheral patio groups were probably inhabited (see Chapter III).

Within an area of 0.88 km², among the 262 structures mapped in Nakum, about 250 were inhabited (the others – temples and pyramids – at the centre and the peripheries had ceremonial functions) (Žračka 2002). Based on ethnohistoric data, most scholars suppose that one structure could be inhabited by 4 to 5.6 persons (Culbert and Rice 1990). This method can be partly applied to Nakum, however it should be stressed that many masonry vaulted buildings situated in the South Acropolis have up to 38 rooms. Thus, more than 4–5.6 persons must have lived in the largest palaces. I propose to make use of the method applied for Sayil, situated in the northern part of Yucatan, to estimate the number of inhabitants who lived in the palaces of the South Acropolis. In the case of Sayil, an average surface area of rooms in masonry-walled buildings (12 m²) and foundation-brace buildings (8 m²) was estimated on the basis of excavated structures, and it was assumed that one room may have been inhabited by 4 people (Tourtellot et al. 1990). In the case of Nakum, similar calculations may be adopted in regard to the South Acropolis, where most of the masonry-walled palace buildings were excavated and it is therefore possible to estimate an average surface area for its rooms (Table 11). In a group of 20 excavated palaces, 137 rooms were discovered³, with an average surface area of approximately 11 m². This group should also include 8 possible palace structures (Structures M, J, K, P, T, 13, 14, and the western wing of Structure I) which have not been excavated or were only partly excavated, though observations made during investigations (in the field) indicate that all of them might have had a total of thirty two rooms. If we assume

³ Our calculations did not include the sweatbath, one temple structure (no. 15), Structure 64 and the complex of chambers situated between Buildings G, H, J and the Interior Acropolis. The latter two structures were probably used as passageways rather than residences and might have served as control points for people who wished to access the Interior Acropolis and the complexes situated in the southern part of the South Acropolis.

Table 11. Dimensions of rooms in inhabited structures in the South Acropolis of Nakum during the Terminal Classic period

Structure number	Dimensions of room/chamber	Surface in m ²
Structure 24		
Ch. 1	4.90x2.45	12
Ch. 2	3.80x2.45	9.31
Ch. 3	3.80x2.45	9.31
Structure 27	4.50x2	9
Structure 62	6.50x3.63	23.59
Structure 63		
Room 1	13.60x2	27.20
Room 2	3.38x2.40	8.11
Room 3	4.55x2.45	11.14
Room 4	2.40x2.45	5.88
Room 5	5.75x2.50	14.37
Structure 63 A		
Room 1	6.15x1.55	9.53
Room 2	6.15x1.20	7.38
Structure 65		
Room 1	12.90x2.10	27.09
Room 2	13x2.10	27.30
Room 3	2.20x2.45	5.39
Room 4	2.20x2.50	5.50
Room 5	3.60x3	10.8
Room 6	9.85x2.50	24.62
Room 7	3.50x2.45	8.57
Structure D dimensions of all 38 chambers of the last architectural stage (D-2a)	----	302.91
Structure E		
Ch. 1	12x1.75	21
Ch. 2	3.05x1.78	5.42
Ch. 3	3.40x1.40	4.76
Ch. 4	4.50x2	9
Ch. 5	4.65x1.95	9.06
Ch. 6	13.30x2.80	37.24

Structure F		
Ch. 1	14x2	28
Ch. 2	14x2	28
Ch. 3	4.90x3	14.70
Structure G		
Ch. 1	11.60x1.85	21.46
Ch. 2	11.60x1.85	21.46
Ch. 3	5.64x2.24-east	12.63
Ch. 4	5.25x2.05-west	10.76
Structure H		
Ch. 1	7.80x1.25	9.75
Ch. 2	11x1.25	13.75
Ch. 3	3.25x3.40	11.05
Ch. 4	2.15x2.35	5.05
Ch. 5	2.50x1+3.30x0.70	4.81
Structure I		
Ch. 1	3.38x2	6.76
Ch. 2	5.50x2	11
Ch. 3	4.40x2	8.80
Structure L		
Ch. 1-2	6.50x2	13
Ch. 3-4	6x2	12
Ch. 5-6	11x2	22
Structure N/60/61		
60-first level	3.25x1.90	6.17
60-second level	3x1.90	5.7
61-first level	3.60x2	7.2
61-second level	2.90x2	5.8
Ch. 1	2.75x1.90	5.22
Ch. 2	6.25x1.90	11.87
Ch. 3	2.75x2	5.5
Ch. 4	2.10x 1.75	3.67
Ch. 5	6.25x1.90	11.87
Ch. 6	3x1.75	5.25
Ch. 7	16.30x2	32.60
Structure O		
Ch. 1	6.50x2.50	16.25
Ch. 2	6.50x2.50	16.25
Ch. 3	6.50x2.50	16.25
Ch. 4	2.90x2.50	7.25
Ch. 5	2.90x2.50	7.25

Structure Q all 7 chambers	5.50x2	11
Structure R		
Ch. 1	4.60x2.50	11.5
Ch. 2	4.60x2.50	11.5
Ch. 3	4.60x2.50	11.5
Ch. 4	6.86x1.55	10.63
Ch. 5	5x1.55	7.75
Ch. 6	10.90x1.79	19.51
Ch. 7	10x1.55	15.5
Ch. 8	10x1.55	15.5
Structure S	15.75x~3.60	56.7
Structure Y All 8 chambers	~5.50x2	11
Structure Z		
First floor:	5.40x1.52	8.20
Ch. 1	4.80xc.a. 1.50	7.20
Ch. 2	5.15x1.54	7.93
Ch. 3	5.07x1.50	7.60
Ch. 4	5x1.46	7.30
Ch. 5	c.a. 5x1.60	8
Ch. 6	5.12x 1.55	7.93
Ch. 7	6.32x1.76	11.12
Second floor: Chambers. 8-13		
Total: 19 structures with 99 chambers/rooms + Structure D with 38 chambers = 137 chambers/rooms		1557.53 m²

that an average of 4 people lived in each room, as in the case of Sayil, then around 676 people inhabited the South Acropolis during the Terminal Classic period.

On the basis of recent archaeological research carried out in the central part of Nakum, it is known that during the Late Classic, construction activity mainly occurred in the Tepeu 1 phase (c.a. AD 600–700/750) and decreased in the Tepeu 2 phase (AD 700/750–800/850). In Yaxha the opposite situation can be observed; there is a hiatus in construction activity during the Tepeu 1 phase (similar to nearby Tikal), whereas during Tepeu 2 phase construction activity increases. Thus there seems to be a connection between the crisis observed in Tikal and Yaxha in the Tepeu 1 phase and the rise of Nakum, which has been clearly shown to have acquired power during this period. A decrease in construction activity during the Tepeu 2 phase indicates that Nakum must have been weakened politically while Yaxha and Tikal experienced a cultural and political rejuvenation.

Table 12. Dimensions of the rooms in all structures inhabited in the South Acropolis of Nakum during the Late Classic period

Structure number	Dimensions	Surface in m ²
Structure D		
Ch. 1	3.40 x 1.70	5.78
Ch. 2	3.40 x 1.70	5.78
Ch. 3	2.80 x 1.70	4.76
Ch. 4	2.80 x 1.80	5.04
Ch. 5	2.80 x 1.80	5.04
Ch. 6	5.20 x 1.80	9.36
Ch. 7	2.40 x 1.80	4.32
Ch. 8	3.70 x 1.80	6.66
Ch. 9	6.80 x 1.60	10.88
Ch. 10	4.45 x 1.60	7.12
Ch. 11	4.15 x 1.35	5.60
Ch. 12	4.70 x 1.45	6.81
Ch. 13	5.00 x 1.15	5.75
Ch. 14	5.35 x 1.30	6.95
Ch. 15	4.75 x 1.35	6.41
Ch. 16	6.95 x 1.35	9.38
Ch. 17	2.65 x 1.20	3.18
Ch. 18	3.35 x 1.20	4.02
Ch. 19	4.40 x 1.20	5.28
Total of Str. D		118.12 m ²
Structure E		
Ch. 1	12x1.75	21
Ch. 4	4.50x2	9
Ch. 5	4.65x1.95	9.06
Ch. 6	c.a. 4.50x2	9
Ch. 7	c.a. 4.50x 2	9
Structure F		
Ch. 1	14x2	28
Ch. 2	14x2	28
Structure I		
Ch. 1	3.38x2	6.76
Ch. 2	5.50x2	11
Ch. 3	4.40x2	8.80

Structure N/60/61		
60-first level	3.25x1.90	6.17
60-second level	3x1.90	5.7
61-first level	3.60x2	7.2
61-second level	2.90x2	5.8
Ch. 1	2.75x1.90	5.22
Ch. 2	6.25x1.90	11.87
Ch. 3	2.75x2	5.5
Ch. 4	2.10x 1.75	3.67
Ch. 5	6.25x1.90	11.87
Ch. 6	3x1.75	5.25
Structure R		
Ch. 1	4.60x2.50	11.5
Ch. 2	4.60x2.50	11.5
Ch. 3	4.60x2.50	11.5
Total: 6 structures with 42 chambers/rooms		339.45 m²

Therefore, in comparison to the earlier Tepeu 2 phase, the Terminal Classic in Nakum is characterised by an extremely strong and intensive increase in political, economic, demographic and cultural activity. The ongoing efforts to estimate the extent of the residential area in the most explored part of the city – the South Acropolis – during the Late Classic, and compare it with data from the Terminal Classic, is of prime importance since such a comparison will allow us to estimate the extent of increase in demographic and construction activity at the turn of the Late and the Terminal Classic periods.

Archaeological research indicates that during the Late Classic Tepeu 2 phase in the South Acropolis, the following buildings existed: D, E, F, I, N/60/61, R, 14/15 and 25. Though they were not excavated, it is reasonable to assume that Structures J, K and M were also in use at that time. We know the numbers and dimensions of the rooms in Structures D, E, F, I, N/60/61 and R during the Late Classic. In case of Structures 14, 25, J, K and M, the number of rooms in the Late Classic period is not precisely known. The rooms of Structures D, E, F, I, N/60/61 and R occupy an area of 339.45 m² (Table 12). An additional space of 187 m² is obtained if we include the area of the above-mentioned unexcavated buildings and assume that they had a total of seventeen rooms (taking into account structure size) and that the average area of each room was 11 m² (which was the average chamber area during the Terminal Classic in the South Acropolis palaces). These estimates should be considered with the caveat that since Structures J, K and M have not been excavated, the above-mentioned number (187 m²) might be an overestimation.

The above-mentioned data (Table 12) indicate that during the Terminal Classic period living space in the South Acropolis increased by nearly three times (assuming that during Tepeu 2, Structures J, K and M were already in existence). There is an apparent connection between population increase and an increase in living space in the South Acropolis. This information is complemented by data from research carried out in the

peripheries that indicates a 39-50% increase in settlement between the Late and Terminal Classic. The fundamental question is: how can we explain the sudden increase in living space at the centre and the increase in settlement at the peripheries? I think that there might be two explanations for this phenomenon; the first being a burgeoning of the numbers of elite inhabitants in the epicentre and people living in the peripheries of Nakum. The second reason may involve the arrival of people from other centres. Migration from other centres is very likely. Increased demographic and cultural activity during the Terminal Classic period in Nakum could have been caused, at least partly, by people migrating from abandoned centres. Since preliminary and limited analysis of pottery from Nakum did not reveal any ceramics with outside influences, it is very likely that the immigrants were from nearby areas within Triangulo Park.

To summarize, it should be stressed that the short term success of Yaxha and Nakum during the Terminal Classic was dependent upon a group of factors, the most important being their proximity to important resources (water sources, trade, and communication routes) and the considerable, if not complete, political and economic independence they gained after the collapse of the former hegemon of this area – Tikal and Naranjo. This last factor certainly allowed Nakum and Yaxha to take the control of the most important river trade routes in the north-eastern part of Peten. The route along the Holmul River was of prime importance since it provided access to the Caribbean Sea via the Holmul site to the northeast of Nakum. It is interesting that the latest archaeological research at Holmul has yielded considerable evidence of Terminal Classic activity (Estrada-Belli 2002: 110), indicating that the Holmul River became one of the most important trade routes in this region during the Terminal Classic period. This route connected with the sea routes which gained prime importance in the Terminal Classic and Postclassic periods. It should be stressed that most of these sea routes were controlled at that time by Chichen Itza. The presence of new elements in the architecture of Nakum and Yaxha, as well as imported Fine Orange, Fine Gray and Plumbate pottery is evidence that both centres established new cultural and trade contacts with centres and areas that were developing or thriving during the Terminal Classic period in the Maya Area, (including Chichen Itza and the Northern Maya Lowlands). A similar tendency can be observed in many other centres in the Southern Lowlands (e.g. sites in the south-eastern Peten [Laporte 2004; Laporte and Mejía 2002; Laporte and Quezada 1998], Calakmul, [Braswell et al. 2004]), which during drastic political and economic transformations occurring during the Terminal Classic period, established new trade contacts with centres that were thriving.

Secondary centres

As far as smaller centres situated in the Triangulo Park area are concerned, Poza Maya, La Pochitoca, Cara Fea, Tintalito, Los Xateros, El Bayal and El Bajón were almost completely depopulated by the end of the Late Classic. In these centres, material from the Terminal Classic period is very scarce or completely absent. In the case of Naranjito we can also observe a population decrease. Yet, based on the percentage of pottery from the respective chronological periods recovered from limited excavations, it seems that during the Terminal Classic about a third of the former population persisted in the city. This population even attempted some rebuilding in the South Acropolis area,

documented during excavations carried out by Chan (1999a). This activity is most probably connected with elite groups that must have continued to function in Naranjito even though the centre was significantly depopulated. A completely different situation can be observed in El Carmen and El Tigre. Based on material obtained from test-pits and looters' trenches, we know that both sites flourished during the Terminal Classic period. It should be noted that El Tigre is situated very close to Nakum, at a distance of only 5 km. Oscar Quintana (personal communication, 2003) notes that from some of the highest buildings in Nakum, it is possible to see the largest pyramid of El Tigre. Archaeological research indicates that this centre could have been built very rapidly at the turn of the Late and Terminal Classic. Intense construction activity from the Terminal Classic period documented by Rosa Chan (1999b) during her research at El Tigre indicates that this centre might have been populated by people coming from other abandoned areas. At El Carmen, Terminal Classic materials also clearly prevailed in all excavated units and it seems that this site saw an important population influx in the period under discussion. Both sites are located in defensible locations in close proximity to Nakum. In my opinion, during the Terminal Classic period they were controlled by and functioned as outposts of Nakum. Another neighbouring site (Laberinto) located west of Nakum also showed important traces of Terminal Classic occupation and it might have played a similar role as El Carmen and El Tigre⁴.

Several other secondary sites discovered by Fialko in the area of Triangulo Park (especially between Nakum and Naranjo [Fialko and Ramírez 2002]) showed none or very limited traces of Terminal Classic occupation and they seem to have been almost completely depopulated by the beginning of this period.

Intersite/rural area – collapse and continuity

Overall, there was a decrease in settlement at the turn of the Late and Terminal Classic in the intersite/rural area of Triangulo Park. However, this decrease was not severe and there are areas where a significant population survived and continued to develop well into the Terminal Classic.

The largest number of sites with Terminal Classic occupation were documented in the area between Yaxha and Naranjo, and between Tikal and Nakum (Fialko 1997b, 1997c). At a few sites, Terminal Classic material prevailed in the test pits or it was described as diagnostic cultural material for all the test-pits excavated. It is most likely that at least some of these settlements may have been founded during this period by people migrating from other sites. Though a hypothesis at present, it seems very likely that the fairly high number of Terminal Classic settlement between Yaxha-Naranjo and Tikal-Nakum is a result of a significant movement of population during the Terminal Classic from Naranjo and Tikal to Nakum and Yaxha, which were still developing during the period in question.

⁴ Three other sites (Fortaleza, Dos Estelas, Sin Aliento), very small in size and discovered by Fialko during her investigations in the intersite areas, are also located west of Nakum and might have served as its frontier centres. They are mainly dated to the Late Classic period but also show important traces of Terminal Classic occupation (Fialko 2005: 257).

In case of the transect connecting Yaxha and Nakum, Terminal Classic settlement was documented only in the sites located close to Yaxha and Nakum, while sites located further inland did not have traces of Terminal Classic occupation. Thus in this case, we observe a concentration of Terminal Classic settlements in close proximity to the centres which dominated during this period.

The documentation of the survival or concentration of significant amounts of people in intersite areas indicates that in some places the rural population was able to cope with the crisis that affected this and other Maya regions, and their settlement continued well into the Terminal Classic period.

Change in political ideology

One of the most essential problems that should be solved while interpreting the events that took place during the Terminal Classic in the Triangulo Park area, concerns the issue of the dedication of carved monuments. Carved stelae and altars were erected to glorify rulers (*k'uhul ajaw*) who possessed supreme political and religious power. Carved monuments appear in three main centres of the park: Naranjo, Yaxha and Nakum. One carved monument was also discovered in La Pochitoca. In the case of Naranjo, the practice of erecting inscribed monuments ends with the dedication of Stela 32 (AD 820) or a little later (Stela 9 that can be dated to the 10th Cycle). Thus, the practice of dedicating stelae and altars ends with the political collapse and breakdown of power in Naranjo during the Terminal Classic. In case of Yaxha, we observe a halt in the erection of carved monuments before the beginning of the Terminal Classic or at the turn of the Tepeu 2 and Tepeu 3 phases. In Nakum only two of the three carved monuments are of Terminal Classic date, but they are from the first part of this period. In Yaxha, the last monument (Stela 13) bears the Long Count date of AD 797. The last dated monument in Nakum (Stela D) was dedicated approximately 50 years later. Thus though both centres continued to develop and even flourish (especially Nakum), during the Terminal Classic they rapidly ended the practice of dedicating carved monuments.

There are two explanations for this phenomenon: a) A shortage or failure of artisans (sculptors and scribes) who were engaged in making stone monuments with rulers' representations and inscriptions; or b) Change in the political ideology underpinning the concept of royal power so that it was no longer necessary to erect these types of monuments.

The first possibility must be automatically rejected, at least in the case of Nakum, where other monuments were manufactured during the Terminal Classic (stucco representations of captives and glyphs on the facade of Structure G; frieze with glyph record on the Structure H facade; paintings from Structures G and H, and masks from the upper parts of Structures G, L and S), indicating that groups of qualified artists existed in the city. In Yaxha, there are no similar examples of carvings and paintings but architects and possibly sculptors working for the elites were definitely present since many splendid palaces were built (North Acropolis, Group B) and existing ceremonial buildings were modified (East Acropolis, Maler Group).

Instead, the end of the tradition of erecting carved monuments in some Maya sites during the Terminal Classic was probably due to a decline in the authority of a single

ruler and the strengthening of the position of the secondary elite. In addition, ideological changes might have further contributed to the cessation in the erection of inscribed monuments.

This decentralization phenomenon and the devolution of royal power to the elite lords is visible in many centres towards the end of the Late Classic period (e.g. Copan and centres of the Usumacinta region) and in the Terminal Classic period. In some centres, this decentralization is manifested in changes in the style of the stelae. Single ruler representation disappears often in favour of multifigural scenes in which two or more figures are depicted (e.g. Caracol [Martin and Grube 2000: 98–99] and stelae from the Central Peten lakes area [Rice and Rice 2004]). These figures are usually simply dressed, without kingly regalia and symbols of high status and power. In many of these stelae, scenes of royal display, ancestors and dynastic rule are extensively replaced by conversational and diplomatic scenes. Similar conversion and diplomacy scenes are also widespread on Terminal Classic Fine Orange vessels of the Pabellon Moulded-carved type (Rice and Rice 2004: 133–134)⁵. This shift in emphasis in stela art from a ruler with absolute authority to both the ruler and officials of high rank supports the hypothesis of a change in the exercise of power and perhaps even in the very concept of power. In my opinion, it seems likely that evidence of this decentralization of power can be seen in the appearance of multifigured conversation scenes in some centres (Caracol, Central Peten lakes area) or in the halt in the erection of carved monuments in others (Nakum and Yaxha).

There is some architectural evidence that during the Terminal Classic period Nakum and Yaxha might have faced some kind of ideological and theological crisis. This is indicated by the fact that during this period, while stress was laid on the constructions and/or development of the palace-residential structures, temples were built or rebuilt on a very limited scale. Archaeological research carried out in 2004 in the large pyramid Structure U in Nakum indicates that by the Terminal Classic, it might have been completely abandoned and was already turning to ruin. In Yaxha, material from the large pyramids situated in the North Acropolis (and possibly also from Pyramid 152 located in Group C) was quarried to build the Terminal Classic palaces. Thus, the halt in the erection of carved monuments as well as the emphasis on building palace-residential structures during the Terminal Classic may reflect changes in the cosmology and theology in which sacred bloodlines were no longer the central theme but were relegated to being merely one of the minor components in the new way of thinking.

The problem of timing of the Terminal Classic period

Another important issue is the duration of the Terminal Classic period in the centres of Triangulo Park. Most archaeologists working in the area of Triangulo Park date the Terminal Classic to the period between approximately AD 850 and 950 (Fialko et al. 2002, 2003; Hermes 2002, Hermes et al. 2002). These dates were adopted from Tikal,

⁵ Rice and Rice (2004: 133–134) assume that conversion scenes from carved monuments in the Central Peten could be connected with substantial changes that occurred during the Terminal Classic, and in particular with the migration of new population groups into this area who might have been “peacefully assimilated and perhaps even expected and welcomed” by the local people.

where the Terminal Classic Eznab phase is dated to AD 850 and 950 (Culbert 1993, 2003). However, it must be stressed that the dating of the Terminal Classic in Tikal as well as in Uaxactun and other neighbouring sites is not precise. It was not possible to connect any dated monument in Tikal with Eznab ceramics. Culbert places the beginning of this phase between AD 830 and 850 (Culbert 1973b, 1993, 2003), i.e. to the period between the dedication of the two last dated monuments: Stelae 24 and 11. Stela 24 which was erected in front of Temple III bore the date, AD 810, and it can be connected with the Late Classic Imix ceramics (Coe 1990). Stela 11 – the last carved monument from Tikal is connected (according to Culbert [1973b]) to the Eznab phase although it was impossible to relate this monument with any ceramic phase. Culbert (1973b: 89) also “feels that Eznab may have lasted about 100 years”. Thus, the timing and ending of the Eznab phase in the case of Tikal is still very problematical. On the other hand, in Xunantunich which is located only a dozen kilometres east of the Triangulo Park area, radiocarbon dates place the Terminal Classic between AD 780 and 890 (Le Count et al. 2002). At present, C¹⁴ dates related to Terminal Classic materials or structures from Nakum and other Triangulo Park sites are not available. I think that it is possible that at least in some of the sites in Triangulo Park, the use of Terminal Classic ceramics may have begun earlier than the usually accepted date of ca. AD 850. Recent excavations carried out in Structure C at Nakum indicate that it was built during the Terminal Classic period. A 4 m deep test pit opened in the floor of Structure C temple yielded Terminal Classic ceramics from the construction fill. However, no earlier construction stages of this building were detected. Stela C bearing the date AD 815 (9.19.5.0.0, 2 Ajaw 13 Yaxkin) stands in front of Structure C and it is almost certain that this monument was erected at the same time that Structure C was constructed. Thus it seems that Terminal Classic ceramics were already in use at Nakum in AD 815. I think that Terminal Classic ceramics at Nakum, and possibly also at other sites of the Triangulo Park began to be used around the beginning of the 9-th century. I also propose that at least in the case of Nakum and Yaxha they continued to be in use for a long time, up to ca. AD 900 or 950. My idea is based on architectural evidence, specifically on the construction stages of the excavated structures that are mainly dated to the Terminal Classic. The following Nakum structures underwent the most extensive modifications during the Terminal Classic: Structure G (5 construction stages), Structure H and Q (4 construction stages, each) and Structures E, R, 24, 26, 27 (3 construction stages, each). The Interior Acropolis and its structures may have been rebuilt at least three times. In comparison with the former chronological horizons (Tepeu 1, Tepeu 2 and earlier periods), the Terminal Classic is characterised by the heaviest construction activity and the existence of the most number of architectural stages (Table 13). Such a considerable number of construction stages (all of which can be dated ceramically) can be indicative of the fact that the Terminal Classic must have lasted in Nakum for a very long time, probably until AD 950. In Yaxha, extensive Terminal Classic rebuilding was registered in the North Acropolis structures (Structures 134, 135 and 146–147–145). The number of times these structures were subjected to remodelling during the Terminal Classic period is much larger than the number of their architectural stages from the earlier periods (Table 14). Thus, it is possible that the Terminal Classic lasted for a very long time in Yaxha as well.

Table 13. Architectural stages documented in all structures investigated at Nakum

Name or number of respective structure	Middle Preclassic	Late Preclassic	Terminal Preclassic or Protodassic	Early Classic	Late Classic Tepeu 1	Late Classic Tepeu 2	Terminal Classic
A					1, 2, 3, 4	5	6
C							1
D		1, 2, 3, 4	5	6, 7	8, 9		10, 11
E			1?	1?, 2	3, 4, 5, 6	7	8, 9, 10
F					1, 2	3	4, 5
G	1			2	3	4	5, 6, 7, 8, 9
H							1, 2, 3, 4
I					1?	1?	2
J							
L							1, 2
N/60/61					1, 2, 3, 4	5, 6	7
O							1, 2
Q							1, 2, 3, 4
R						1	2, 3, 4
S							1, 2
T						1?	2?
U						1, 2?	
V							1, 2
Y							1, 2
Z							1, 2
12							1
12A							1
14			1?, 2?, 3?	4?	5?	5?	6
15			1, 2?	3	4?	4?	5
24							1, 2, 3
25						1?	2?
26							1, 2, 3
27							1, 2, 3
52							1
53							1, 2

62							1
63							1, 2, 3?
63A							1, 2?
64							1, 2
65							1, 2, 3?
96							1, 2
99			1				2
BALLCOURT						1	2, 3

Postclassic settlement

Archaeological research in Nakum and Yaxha indicates that there was a settlement gap between the end of the Terminal Classic and the first settlement of the Postclassic period (that occurs in the final or the second part of the Early Postclassic; see: Chapter III). Such late and rare Postclassic material indicates a cultural discontinuity as well as the fact that the original inhabitants of the Classic period must have abandoned both centres as early as the Terminal Classic, most likely during its second half, or perhaps towards the end of this period. This data is consistent with Postclassic settlement in many other Southern Lowland sites, i.e. Tikal, Copan and Quirigua, where we observe a discontinuity and a settlement gap between the Classic and Postclassic periods. Material from the Postclassic complexes at these sites indicate that they were reoccupied by new groups of people with distinctive ceramics (see: Culbert 2003, Sharer and Traxler 2006).

All archaeological data indicate that the factors that led to the collapse of Nakum and Yaxha must have been present during the Terminal Classic despite the continuity in cultural development that can be observed in Nakum and to a lesser extent, in Yaxha. Traces of settlement from the Postclassic era can be most likely connected with groups of people who came from the Central Peten lakes area. This is the closest area where settlement continuity from the Classic to Postclassic period can be observed (D. Rice 1986, P. Rice 1986, Rice and Rice 2004). Postclassic traces, discovered in the other Triangulo Park centres (Poza Maya, El Bajón, Cara Fea) are even more scarce. These settlement traces were most likely left by groups of people who came some time after these centres were abandoned by the original inhabitants. Most likely, they squatted in the abandoned structures and left pottery and other Postclassic artefacts during their short visits. Available archaeological data indicates that by c.a. AD 1000, all the Triangulo Park centres were completely or almost completely abandoned and small Postclassic groups from outside the area reached them at a later date.

Table 14. Architectural stages documented in all structures investigated at Yaxha

Name or number of respective structure	Middle Preclassic	Late Preclassic	Early Classic	Late Classic Tepeu 1	Late Classic Tepeu 2	Terminal Classic
1		1, 2			3, 4	5
2					1	2
3					1	2
4		1, 2, 3, 4, 5	6		7, 8	9
5						1, 2
6		1, 2	3		4?	5
7						1, 2
90		1				2
103						1, 2
109						1, 2, 3, 4
134		1			2	3, 4, 5
135						1, 2
137		1, 2, 3, 4, 5, 6				7
142		1, 2, 3, 4, 5, 6, 7, 8, 9				
144		1, 2				
146–147–145					1	2, 3
148						1
149						1
152		1				2
216		1	2, 3		4	5
218			1		2, 3	4
375					1	2
Balkcourt 2 (Strs 132 and 133)						1?

THE ISSUE OF COLLAPSE

It is difficult to give a satisfactory explanation, based on the available archaeological data, for the collapse of the centres situated in the Triangulo Park area. We must keep in mind that a different set of reasons might have led to the decline of the each of the centres in the park. We are not sure if these factors, which led to the breakdown of Naranjo and other

smaller centres at the turn of the Late and the Terminal Classic also caused the collapse of Nakum or Yaxha, which were depopulated about 100 or more years later.

The reasons for the demise of the Classic Maya civilisation is one of the most hotly debated topics in Mesoamerican archaeology. Numerous explanations have been presented by different scholars. Some of them include natural catastrophes such as hurricanes, earthquakes and diseases (Spinden 1928, MacKie 1961). Other theories emphasise ecological and population factors and seek to explain the collapse in terms of an increasing population straining the agricultural system to dangerous limits. According to these explanations, the overpopulation and/or intensification of agricultural systems (which included shortening of fallow periods) might have led to the overexploitation and degradation of the natural environment (Culbert 1988). Of late, an increasingly popular theory attributes the Maya collapse to drastic climate changes in the form of prolonged drought. The theory is mainly based on data from core samples taken from lakes in the northern Yucatan (Curtis et al. 1996; Hodell et al. 1995, 2001, Gill 2000). Another theory, promoted by Eric Thompson (1954, 1966), indicates that the Maya civilisation collapsed as a result of a peasants' revolt. In Thompson's model, the increasing burden of tributes imposed on the peasants by the elites finally led to a revolt and the breakdown of Maya civilisation. Another theory posits that competition between the elites or the noble lineages and the royal dynasty might have led to or influenced the fall of at least some centres (Arnauld 2002, Fash 2001, Fash and Stuart 1991). Demarest (1997) thinks that the collapse of the Maya civilisation was caused by "elite status rivalry", which manifested itself in various ways: in intensive construction activity, in ritual displays, in the intensification of warfare or in ecological exploitation. This rivalry was a result of a burgeoning elite class (the result of polygamy) that placed heavy pressure on local populations, as well as on the economy and resources.

The role of war as a crucial factor for the collapse of Maya civilisation was espoused by many scholars such as George Cowgill (1979) and Arthur Demarest, among others. Cowgill (1979) argued that warfare for territorial aggrandizement was a very destructive factor during the Late Classic period. He proposed that the intensification of warfare might have stimulated population growth, eventually leading to overpopulation. Demarest (1992) argues that the power of the Maya lords was based on ideology and that the political system was very unstable. He also theorises that competition between the elites resulted in the escalation of conflicts and in the overexploitation of the environment. In his view, the crucial factor that led to the collapse was mismanagement by the Maya elites (comp. Inomata 1995).

Among the theories that attribute the collapse of the Maya civilisation to external factors, foreign invasion and the so-called trade theories should be mentioned. The foreign invasion theory was promoted mainly by archaeologists working in Seibal and Altar de Sacrificios (Adams 1971, 1973b, Sabloff 1973, Sabloff and Willey 1967; see also A. Chase 1983). According to these scholars, the centres situated in the Pasión region were invaded by Mexicanised Maya groups or non-Maya groups from the Gulf Coast or Yucatan. Such an invasion disrupted the Maya socio-economic system and led to its collapse. The trade hypotheses assume that long-distance trade was very important for Maya society and when it was disrupted or restricted, the Maya collapsed. According to the model proposed by Rathje (1971, 1973), the lowland Maya from the core area were

outcompeted by the buffer zone sites and cut off from critical resources. In turn, the buffer zone area was later outcompeted by the Mexicanised groups which leaned more heavily on sea transport and sea-based trade routes. According to Webb (1973), the Lowland Maya developed secondary states in the course of trade contacts with the primary state of Teotihuacan in Central Mexico. In his view, the Maya were not able to adapt themselves to new economic conditions that arose towards the end of the Classic period and were related to the emergence of commercial trade and secular rule. As a result, the Southern Lowlands Maya were cut off from essential external sources of wealth by their neighbours from the Northern Lowlands and highlands, who lived in more favourable environments, close to developing sea and land trade routes. Another scholar, David Freidel (1986), argued that towards the end of the Classic period there was a significant change from theocratic to more secular rule, which was better adapted to new changing trade patterns. However, the Maya from the Southern Lowlands ideologically were not well adapted to the new changes and they were outcompeted by the Maya from the Northern Lowlands.

Increasing archaeological evidence indicates that the main factors that led to the decline of the Classic Maya civilisation were overpopulation, degradation of the environment, intensification of warfare and climate changes (Sharer and Traxler 2006). Each of these factors will be analyzed below in relation with the Triangulo Park area.

Studies on Maya settlement and demography indicate that by the end of the Late Classic period, the Maya population reached a very high density (Culbert and Rice 1990). Culbert (1988) argues that during the Late Classic, the population density was ca. 200 persons/km². Such a large population was not able to survive by using swidden agriculture, so the Maya introduced intensified methods of cultivation as population increased during the Classic period (Culbert 1988). These intensified methods included terracing and the construction of raised fields (which were detected in some regions, e.g. Caracol, Tamarindito) as well as the shortening of fallow cycles. However, intensive methods of cultivation put great stress and pressure on an already vulnerable agricultural system that might have been very sensitive to even small climatic variations. Intensification of agriculture could, according to some scholars (Culbert 1988, Sanders 1973, Webster 2002) lead to grass invasion and plant pests, erosion and deforestation. Deforestation was documented in the Central Peten (Rice 1993, 1996), in the Copan Valley (Rue 1987) and in the north-western Peten (Laguna Tuspán) (Galop et al. 2004). It might have had particularly drastic consequences and might have led to destruction and soil erosion in large areas or/and decreased rainfall. We should remember that the forest is a reservoir of moisture which evaporates into the atmosphere via evapo-transportation and then returns to the ground as rain. Studies on deforestation in modern times show that if trees are cut down, the climate becomes warmer and drier (Shaw 2003: 161). Thus when large swaths of areas were deforested and deprived of natural overgrowth, drought might have resulted in some regions (Shaw 2003, Webster 2002: 255-257). Deforestation might have been caused not so much by bringing new areas under cultivation, but by the growth of settlements over large areas (due to a demographic growth) increasing the need to obtain more wood for construction and fuel. Thus, it seems probable that at least in some regions of the Southern Maya Lowlands, the population reached a very high density by the end of the Late Classic period, causing long-term environmental degradation. It

should be noted that agrarian failure and the degradation of the natural environment could have had drastic socio-economic effects and could have led to disease, closure of trade routes and intensifying warfare.

In Triangulo Park, as in many other areas of the Southern Lowlands, we can observe a high density of settlement during the Classic period (comp. Rice and Culbert 1990). Archaeological research carried out in Triangulo Park indicates that the major and secondary centres, as well as a great number of sites situated in the intersite areas reached their cultural and demographic peak during the Late Classic period. There is considerable data on settlement density as a result of investigations carried out in the intersite areas. The Rices (1990) calculate that the population density in the Yaxha -Sacnab basin averaged 211.8 persons/km² during the Late Classic (for the overall terrain which was surveyed by them) and 272.6 persons/km² (for inhabitable land only). It should be also stressed that the Late Classic material was discovered in 92% of all sampled sites and constituted 51% of all material discovered during Anabel Ford's investigations in the area between Tikal and Yaxha (Ford 1986). Late Classic material also clearly prevailed in the intersite survey carried out by Vilma Fialko at the Yaxha-Nakum, Nakum-Tikal and Yaxha-Naranjo transects (Fialko 1996a, 1997c, 1997d; Lou 1996). Data from these research projects indicate that the Triangulo Park area and its surroundings were very densely populated during the Late Classic and might have faced problems related with overpopulation. This in turn might have pressured the fragile agricultural system to dangerous limits and put enormous pressure on the local environment. Most of the information about high population growth and its impact on the natural environment in the area of interest was the result of a multidisciplinary study carried by the Yaxha-Sacnab Historical Ecology Project. According to Don Rice (1978), swidden agriculture was not able to sustain such a huge population increase in the Yaxha – Sacnab region and he argues that by the end of the Late Classic period, food production probably came under severe strain, and that population growth in the Yaxha-Sacnab basin “was accompanied by intensification of the subsistence system and the disappearance of larger vegetation from much of the landscape” (Rice 1978: 57). Deforestation is confirmed by the decline in arboreal pollen during the Classic period which was documented in the Yaxha-Sacnab Lakes as well as in other Central Peten lakes (Peténxil, Quexil) (Rice et al. 1985). Deforestation, cultivation as well as architectural construction accelerate erosion rates, sometimes on a very large scale. The heavy accumulation of sediments documented in Lake Yaxha and Lake Sacnab suggest erosion on a scale large enough to be very destructive (Deevey et al. 1979). Erosion probably affected terrestrial as well as lacustrine microenvironments. For example, in the Yaxha-Sacnab basins, a reduced mollusk population was documented through time (with the lowest level in the Late Classic and subsequent recovery during the Postclassic period). In addition to this nutritional and soil loss, if we consider even a small-scale climatic change (which might have been triggered by deforestation), the cumulative effect of these adverse environmental conditions might have resulted in a period of unmitigated stress on the local population. Don Rice (1996: 201) supposes that albedo might have altered the microclimate in Central Peten reducing rainfall and raising temperatures, although such climate changes were not clearly documented during the research of the Central Peten Historical Ecology Project. Rice (1978: 58) also argues that the environmental degradation which was documented in the Yaxha-

Sacnab basins can be correlated with the great depopulation that took place during the Terminal Classic period in this area. He also states that “the Maya of Yaxha-Sacnab region drastically altered the terrestrial and aquatic components of the ecosystem, and it is tempting to see some relationship between this degradation and the Maya collapse” (Rice et al. 1985: 103). If in fact the Triangulo Park area and other neighbouring areas were afflicted with environment degradation problems and climate changes, Nakum and Yaxha could have survived the other centres owing to ready access to water sources and the fauna and flora of these water bodies. Elite control of water resources for agricultural production might have become very essential, especially after the depletion of soil nutrients due to overuse (Lucero 2002) and also at times when there might have been some disturbance in the climate.

Warfare and the ensuing destruction are other very popular factors favoured amongst many Maya archaeologists (Demarest 1997; Demarest et al. 1997; Webster 1977). Archaeological research carried out in Petexbatun and in the Usumacinta region indicate that the intensification of conflicts led to the collapse of the majority or many centres in these areas. On the other hand, research in the Petexbatun region does not show evidence of any ecological crisis or drought (Demarest 1997, 2004). Also, traces of malnutrition or illnesses caused by malnutrition were not found in this region (Wright 1997). They were documented in the Copan Valley (Storey 1992) and also in Tikal (Haviland 1967) at the end of the Classic period. In the Triangulo Park area, unequivocal traces of armed conflicts relating to internal warfare or external attack that might have caused the collapse of any of the above-mentioned centres were almost not found. Walls or other forms of fortification were not discovered in any of the park’s centres. However, we should keep in mind that the centres that were still developing during the Terminal Classic in Triangulo Park were safely situated in places that provided them with natural protection in case of conflicts. Being situated at an easily defensible location was one of the factors that played a crucial role in the survival of other Maya centres, e.g. Seibal, Altar de Sacrificios or Punta de Chimino, in the Pasión region. This was also the main factor when Terminal Classic and Postclassic settlements were developed in the Central Peten lakes area (D. Rice 1986, P. Rice 1986, Rice and Rice 2004). Yaxha is located on a hill which extends along the northern shore of Lake Yaxha. In the case of Nakum, the South Acropolis was made into a very defensible spot during the Terminal Classic. It must be noted that El Tigre and El Carmen (putative satellites of Nakum) are situated at naturally defensive places.

In Nakum, several traces that could be related to conflict were found. For example, one of the carved monuments, Stela U, was heavily destroyed at its base. Traces of deep cuts in the lower part of the stela indicate attempts at overturning it. This damage is probably related to the pre-Columbian period – at least prior to the early 20-th century, for it was noted by Morley (1938, Vol. 2: 12) and it is also visible in the photograph made by Tozzer (Tozzer 1913: plates 44.2, 52.2). Another carved monument (Stela D) was shattered into pieces, most probably also during pre-Columbian times since it was discovered completely broken by Tozzer (1913: 170). Moreover, it is worth mentioning the discovery of skeletal remains on the plaza floor next to Structure L (Burial 15). The archaeological context of the burial as well as the arrangement of the skeleton indicate that the deceased had never been buried; his hands were probably tied when he died. These

traces might be related to encounters or conflicts that took place at the end of the Terminal Classic. Particularly meaningful is the fragmentation of Stela D and the attempt to overturn and destroy Stela U, suggesting attack from outside or a rebellion triggered by local inhabitants trying to destroy symbols of royal power. This line of reasoning is supported by the fact that Stela C, which does not bear any representation of a ruler but a glyphic text only, was left intact. Some scholars would rather think that these were traces of a peasant revolt (theory favoured by Thompson [1954, 1966]) or traces of inner tensions provoked by elite members mutinying against the central power. However, more studies are needed to confirm such assumptions and answer this and other questions regarding the last days of Nakum.

Of late, the theory that drought was the main factor leading to the collapse of Classic Maya civilisation has gained popularity. Samples taken from two lakes (Chichancanab and Punta Laguna) located in the Yucatan Peninsula indicate that there was a prolonged drought between AD ~800 and 1000 (Hodell et al. 1995, 2001; Curtis et al. 1996). This drought was attributed to increased solar activity (Hodell et al. 2001: 1369). Studies in the fluctuations in the annual discharge of the Rio Candelaria watershed also indicate the existence of extended drought conditions in this area at the end of the Classic period (Braswell et al. 2004). Extended dry periods with peak droughts centred at approximately AD 810, 860 and 910 were also recorded in the Cariaco Basin of the southern Caribbean. According to Haug et al. (2003), the Cariaco Basin sediment record supports the hypothesis that regional drought played an important role in the collapse of the Classic Maya. On the other hand, it should be noted that so far, conclusive traces of drought in the areas situated farther to the south have not been found. Samples taken from the Laguna Tamarindito in the Petexbatun region do not indicate the presence of drought during the Terminal Classic period (Dunning et al. 1998: 147). Similarly, the isotope record from Lake Peten Itza did not confirm any drastic climate changes during the last 5000 years (Brenner et al. 2002: 150). If drought was caused by increased solar activity, it should have had a global character and its traces should have also been found in the Southern Lowlands, beyond the northern Yucatan. It should be also stressed that the early demise and abandonment of centres such as Piedras Negras and Yaxchilan which are located on the banks of the Usumacinta River challenge the drought theory as the decisive factor in the collapse of the Maya. On the other hand, since the Maya Lowlands are characterised by changing weather patterns (Shaw 2003), the severity of the impact of the drought might have not been the same in different regions. Based on data obtained from the analysis of the cores of both the above-mentioned lakes situated in the northern Yucatan, Richardson Gill argues in his book titled "Great Maya Droughts" (2000) that severe drought at the end of the Classic period led to the collapse of the Classic Maya. In Gill's opinion, the drought was so severe that lakes and rivers dried up. I think that it is possible that the drought might have contributed to the collapse of at least some Maya sites located in the Southern Lowlands, including the Triangulo Park area, but more studies are needed to confirm this. If drought indeed affected north-eastern Peten (it is not important whether it was caused by anthropogenic deforestation or increased solar activity), centres such as Nakum and Yaxha might have survived since they were situated near water. Braswell et al. (2004: 188) think that during the Terminal Classic, the survival of the considerable population at the epicentre of Calakmul was

possible thanks to the existence of elaborate reservoir systems at the site. However, it is difficult for me to agree with Gill's scenario. In his opinion, the drought was so severe that lakes and rivers went dry. This theory is not consistent with the fact that Nakum and Yaxha continued to develop during the Terminal Classic when the drought was supposed to have reached its peak, a circumstance that would have precluded the continued growth of Nakum and Yaxha.

Having said that, it is certainly possible that climate changes resulting in prolonged drought and uneven rainfall might have "exacerbated existing local problems" (Lucero 2002: 820) or might have set in motion forces (ideological failure, agricultural crisis, peasant or noble revolts, failures in management, etc.) that eventually led to the collapse of Maya civilisation.

* * *

Based on archaeological evidence from different archaeological projects carried out in the Central Peten and its neighbouring areas, we may attempt to present a scenario for the collapse of the Triangulo Park centres with the caveat that this scenario might be hypothetical, despite the fact that it is based on archaeological and paleo-environmental data.

It seems very likely that overpopulation, environmental degradation and possible climatological changes disrupted Maya society in the Triangulo Park area and in other regions of the Maya Lowlands as well. Overpopulation combined with settlement expansion to new areas and intensification of agriculture might have laid undue pressure and stress on the local environment, ultimately leading to its degradation. Arboreal vegetation disappeared in the vast areas of the Central Peten area, terrestrial and lacustrine habitats were altered, fauna and flora resources were reduced and erosion drastically increased, as confirmed by data from the Central Peten Historical Ecology Project. Under these conditions, microclimatological change in the Central Peten lakes area seems very probable, as Don Rice proposed (Rice 1996: 201). All these factors probably led to agricultural failure and wide shortages of food, fuel and other important resources. Further, these adverse conditions could have overlapped with drought, traces of which were documented in the Yucatan Peninsula or the Ciriaco Basin. These above-mentioned factors might have led to a loss of faith in the ability of the traditional rulers of Maya cities with a consequent weakening of their authority, triggering a politico-economical crisis which involved the breaking up of the large polities of this area into smaller kingdoms such as Nakum, Yaxha, and nearby Xunantunich. These events might have led to the extensive depopulation of most of the Triangulo Park centres and the neighbouring areas. Nakum and Yaxha managed to survive the breakdown of their neighbours for a long time, thanks to their favourable location which granted them ready access to the lake and river. Other factors contributing to the longevity of the sites probably included monopolization of agricultural land and the assumption of control over trade routes after the former hegemonies of the region collapsed, and the use of new, alternative trading partners (as is confirmed by new architectural elements or modes seen in Yaxha and Nakum at that time). Also, the migration of people from neighbouring areas might have contributed to their longevity. Elites from both centres forged trade contacts with the Southern and Northern Maya Lowlands' centres and areas that were still developing at that time.

The same factors that caused the collapse of other Maya centres may have eventually been responsible for the final collapse of Nakum and Yaxha. It should also be noted that the increase in the size of the elite groups in Terminal Classic Nakum might have placed an increased burden on the peasants who had to work increasingly harder to meet the needs of the elite. Given the degradation of the environment, finding food must have become a serious problem and it may have been necessary to import food from distant places that did not suffer such environmental damage. The collapse may have been hastened by the complete breakdown of the already weakened trans-Peten trade route, which during the Terminal Classic plied along the Holmul River. Architectural influences from northern Yucatan indicate that Nakum elites might have maintained trade and culture contacts with this area. It is possible that the collapse of the Puuc region centres and other sites in the north c.a. AD 950/1000 also affected at least some Southern Lowlands centres (including Nakum) which continued to develop in the Terminal Classic period.

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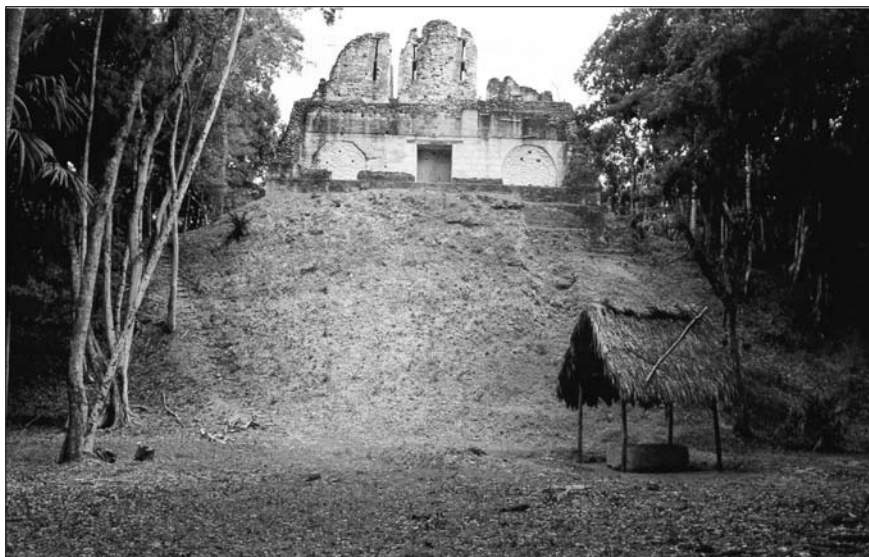
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PHOTOGRAPHS



75. Nakum, view from the south for the eastern part of superstructure discovered at the top of Structure 99 platform (up), along with a view of the eastern part of Room 2 of the same superstructure (bottom) (photographs by the author)



a



b

76. Nakum, Structure A. General view of the structure (a) and of the temple building located at the top of pyramid platform (b) (photographs by the author)



77. View of Structure C from Nakum (photograph by the author)



78. Nakum, general view of Structure V (photograph by the author)



79. Nakum, general view of Patio 1 with Structure E in the background (photograph by Wiesław Koszkuł)



80. Nakum, southern facade of Structure D after restoration (photograph by the author)



81. Nakum, general view of Structure E (photograph by the author)



82. Nakum, general view of Structure G under restoration made by the Triangulo Project (photograph by the author)



83. Representation of a captive decorating wall of G-1c stage, Structure G (photograph by the author, Proyecto Triángulo, IDAEH)



84. Nakum, general view of Structure H along with rooms constructed between Structures G, H, I and the Interior Acropolis (a small space with two stone pillars is seen in the foreground) (photograph by the author)



85. Nakum, general view of Structure N/60/61; top: view of Structure N/60/61 in 2003; bottom: view of the same structure in 2006 from the top of the Interior Acropolis (photographs by the author)



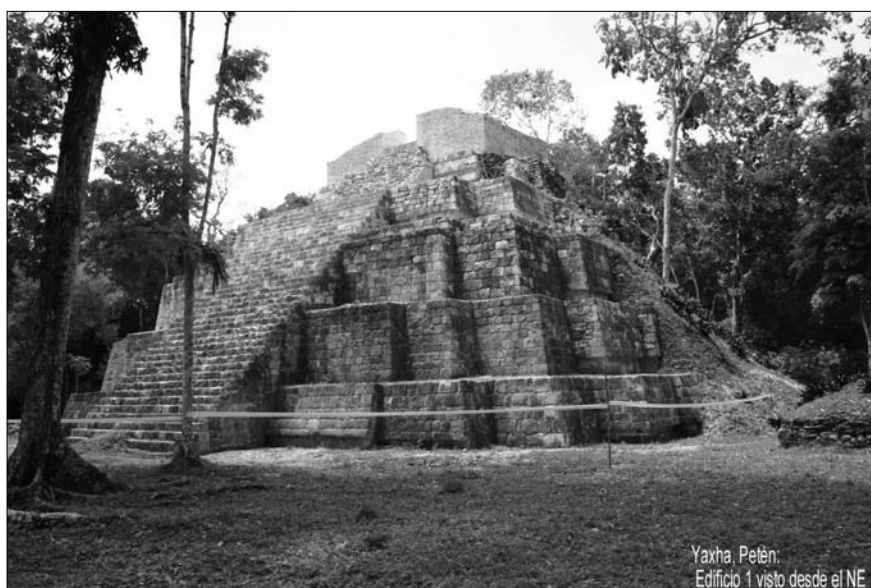
86. View of Structure 63A with two stone pillars (photograph by the author)



87. Nakum, general view of Structure Z and Patio 7 (year 2004), numbers 1 and 2 show the first and the second floors of Structure Z (photograph by the author)



88. Yaxha, general view of Structure 216 (photograph by the author)



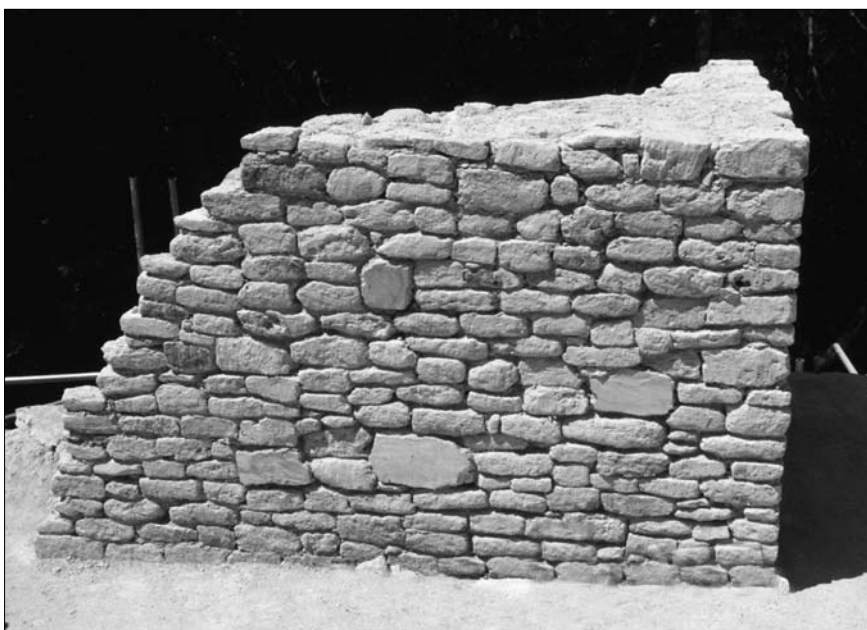
89. Yaxha, general view of the main facade of Structure 1 after restoration done by PDS-Yaxha (photograph by Bernard Hermes)



90. Yaxha, Structure 1. View of the platform with *talud-tablero-reverse talud* motif (photograph by Wiesław Koszkuł)



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93. Yaxha, general view of the south-western part of the North Acropolis platform with Structure 134 after restoration carried out by PDS (view from the south) (photograph by the author)



94. Yaxha. South-western corner of the South Acropolis platform with stairway leading to the top of this complex and Structure 375 (photograph by the author)